Lithotriptic Activity of

YAANAI NERUNJIL CHOORANAM

&

Haematinic Activity of

MANDOORA CHENDURAM

(DISSERTATION SUBJECT)

For the partial fulfillment of requirements to the Degree of

DOCTOR OF MEDICINE (SIDDHA)

(GUNAPADAM BRANCH)

GOVERNMENT SIDDHA MEDICAL COLLEGE

Tirunelveli – 627002

(Affiliated to the Tamilnadu Dr.M.G.R. Medical University, Chennai)

APRIL – 2013

GOVT. SIDDHA MEDICAL COLLEGE PALAYAMKOTTAI.

DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled Lithotriptic, diuretic anti spasmodic Of **YAANAI NERUNJIL CHOORANAM** (Pedalium murex) And Haematinic Activity Of **MANDOORA CHENDURAM** is a bonafide and genuine research work carried out by me under the guidance of **Dr.G.EssakkyPandian, M.D(S)**, Post Graduate Department of Gunapadam, Govt.Siddha Medical College, Palayamkottai and the dissertation has not formed the basis for the award of any Degree, Diploma, Fellowship or other similar title.

Date: **Signature of the Candidate**

Place: Palayamkottai (R. Vinothini)

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CERTIFICATE BY THE GUIDE

This is to certify that the dissertation entitled Lithotriptic, diuretic anti spasmodic Of **YAANAI NERUNJIL CHOORANAM** (Pedalium murex) And Haematinic Activity Of **MANDOORA CHENDURAM** is submitted to the Tamilnadu Dr.M.G.R Medical University in partial fulfillment of the requirements for the award of degree of M.D(Siddha) is the bonafide and genuine research work done by **Dr.G.EssakkyPandian, M.D(S)**, Post Graduate Department of Gunapadam, Govt.Siddha Medical College, Palayamkottai.Under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree, Diploma, Fellowship or other similar title.

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Place: Palayamkottai

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This is to certify that the dissertation entitled Lithotriptic, diuretic anti spasmodic Of **YAANAI NERUNJIL CHOORANAM** (Pedalium murex) And Haematinic Activity Of **MANDOORA CHENDURAM** is a bonafide work carried out by **Dr. R. Vinothini** under the guidance of **Dr. G.EssakkyPandian, M.D(S)**, Post graduate department of Gunapadam, Govt.Siddha Medical College, Palayamkottai.

Seal & Signature of the HOD **Seal & Signature of the Principal**

Date: **Date:**

Place: Palayamkottai **Place:** Palayamkottai

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CONTENTS

INTRODUCTION

Nature is man and man is nature. Man is said to be the microcosm and Universe is the macrocosm, because what exists in the Universe exists in man. Man is nothing but a miniature of Universe, containing the five atoms of various principles, which constitute the minerals, vegetables and the animal kingdom.

According to siddha medical science, the universe originally consisted of five basic atoms viz, earth, water, fire, air and space, which correspond to the five senses of the human body.

The earth is the first atom which gives fine shape to the body including bones, tissues, muscles, skin, hair etc. Water is the second atom representing blood, secretions of the glands, vital fluid etc. Fire is the third atom that gives vigor and vitality to the body. Air is the fourth atom which helps in digestion, respiration, circulation and besides stimulate the nervous system. Above all, earth is the characteristic of man's mental and spiritual faculties.

When the equilibrium of the pancha boothas and uyir vayus are disturbed, various diseases are formed in our body. Kalladaippu is a common disease of urinary tract which has the following symptoms, burning micturiction, urinary obstruction, low back ache, referred pain in genital organs and in tip of penis, abnormal deposits in the urine. In modern science, these symptoms can be correlated with 'urolithiasis'

Prevalence of urolithiasis

[1]Urolithiasis is a common disorder estimated to occur in approximately 12% of population with a recurrence rate of 70% - 80% in male and 47% - 60% in females.

[2]In our country, the increasing incidence of renal stone disease is compounded by urine output. The prevalence figures of stone disease observed in developing country in tropical regions are similar to rates of Western countries with incidence of renal colic particularly high in warm months. Ultimately, in our country, the climatic condition prevailing here plays a major role along with abnormal diet habits, insufficient water intake, and sedentary life style.

The plant-based traditional medicine systems continues to play an essential role in health care with about 80% of the World's inhabitants relaying mainly on traditional medicines for their primary health care. Yaanai Nerunjil (pedalium murex Linn) is perhaps the most useful traditional medicinal plant in India, which works out well in urolithiasis, according to the literature in Gunapadam Mooligai vaguppu page no, 527.

Yaanai Nerunjil is an easily available plant. Hence it is reachable even to the people below the poverty line, so that the author has selected

[1] www.ajpcr.com/vol 5 supp
[2] Articles from clinical cases in Mineral and Bone metabolism 2008 may-august 5(2):101-106.

this dissertation, which progresses, to enlight the “Diuretic, anti-spasmodiac and Lithnotriptic activity” of Yaanai Nerunjil chooranam.

AIM AND OBJECTIVES

[3]Yaanai Nerunjil has enormous pharmacological actions including, anti-oxidant activity, nephro-protective activity, anti-bacterial activity, anti-ulcer activity, anti-veneral activity, anti-diabetic activity and anti-hyperlipidemic activity. Day by day, many more special articles and thesis has been going on related to each and every part of Yaanai Nerunjil.

The principle aim of the present study is to prove the efficacy of 'Yaanai Nerunjil chooranam' for diuretic, anti-spasmodic and lithotriptic activity Yaanai Nerunjil is now considered as a valuable source of unique natural products for development of medicines against various diseases.

The main objectives of the present study is to stimulate an awarness about the siddha science and to highlight the efficacy of siddha drugs among the public.

The drug was studied in the following aspects,

- Botanical Aspect
- Phytochemical Aspect
- Gunapadam Aspect
- Siddha Aspect
- Modern Aspect

[3] www.ijrap.net International journal of Research in Ayurveda and pharmacy

- Bio-chemical Analysis
- Pharmacological Analysis
- SEM analysis
- FTIR analysis
- Microbiological Analysis
- Clinical Assessment.

BOTANICAL ASPECT OF PEDALIUM MUREX Linn

[4]BENTHEM &HOOKER SYSTEM OF CLASSIFICATION

Kingdom	-	Plantae
Subkingdom	-	Tracheobionta
Division	-	Spermatophya
Sub Division	-	Angiospermae
Class	-	Dicotyledonae.
Sub class	-	Gamopetalae
Series	-	Bicarpellatae
Order	-	Personales
Family	-	Pedaliaceae
Genus	-	Pedalium
Species	-	Murex

[5]VERNACULAR NAMES

San	-	Gaja daunstree, Gokshura, Tittagokshura
Tamil	-	Anai nerinjil, Peru nerunjil
English	-	Pedalium murex
Hindi	-	Bara gokhru, Kodvagokhru, Faridbuti
Malayalam	-	Kathenerinmil, Kakka mullu, ana nerinnil, Kattu nerinjal.

[4] Modern scientific press.com
[5]www.readbag.com

Telugu	-	Enugupelleru, Pedda Paleru, Enga Palleru mulla, yenugapelleru.
Kannada	-	Annegalu-gida, Aneneggilu, Doddaneggilu.
Marathi	-	Mottu ghokru, Mother ghokheru, Hatti charette, Karonathia.
Gujarathi	-	Kadvaghokru, Mothaghokru, Mothangokharu, Mottoghokru, Ubbaghokru.
Bengali	-	Motto ghokru, Baraghokhu, Mother ghokru
Oriya	-	Gokshura, Gokara
Punjabi	-	Gokrukalan
Konkani	-	Selusaran
Arabic	-	Khaseke Kabir
Burmesi	-	Sulegi
Singapure	-	Ati neranchi
Persian	-	Khasake Kala

[6]MORPHOLOGICAL CHARACTER

Stem

Erect or ascending annual herb up to 75cm tall, slightly succulent, with much-branching, stem.

[6] www.ncbi.nim.nih.gov

Leaves

Leaves opposite or alternate, simple; stipules absent. Petiole up to 3.5cm long; blade oblong-elliptical to obovate, upto 5cm x 3.5cm, base acute, apex rounded or truncate, margin irregularly toothed or lobed but sometimes entire, glabrous above, scaly glandular below.

Flower

Flower solitary in leaf axils, bisexual almost regular, 5 merous; pedicel slender, short, at base bearing nectarial glands

Calyx

Calyx deeply divided into lanceolate segments 2mm long, persistant in fruit.

Corolla

Corolla narrowly funnel-shaped, yellow, with tube up to 2.5cm long and spreading, almost equal lobes. 5mm long and spreading, almost equal lobes 5mm long, glabrescent or with a few hairs. In the throat; stamens 4, included in corolla tube, fi-laments glandular hairy at base.

Ovary

Ovary superior, 2 celled style slender, stigma 2 lobed.

Fruit

Fruit an indehiscent capsule 1-2cm x 0.5-1xm, hard, pyramidal, 4-angled, with a spreading spine. 3mm long at the base of each of the 4 angles, Abruptly contracted below the spines, rounded to acute at apex,

rugose or tuberculate, few – seeded. Seeds narrowly cylindrical 6mm x 1.5mm, 3-angled towards the apex, black.

Pedalium comprises only a single species plants of pedalium murex with prostrate stems can cover an area up to 1m in diameter. The flowers open in the morning and close early to late in the afternoon. Plants can be found flowering throughout the year.

[7]PHYTOCHEMICAL STUDIES

Perliminary chemical examination of Pedalium murex revealed presence of naturally occurring different chemical constituents

The whole plant is reported to contain medicinally important.

Fruit

Mainly fruit contain alkaloids (3.5% - 5%), stable oil, aromatic oil, resins, carbohydrates, saponins, glycosides, and Triterpenoids and also two important flavanoids like

a) 2', 4', 5' trihydroxy-5,7-dimethoxy flavones

b) Triacontanyl dotriacontanoate.

Leaves:

The study on leaves reports some important falvanoids like dinatin and 7-glucoronide, diosmetin and its 7-glucoronide, pedaltin and pedalin.

Alkaloids, steroids, resins, saponins, and proteins are also reported.

[7] ww.ncbi.nim.nih.gov

Root:

The root contained novel phenolic compounds like phenol, 2-(5,6-dimethyl pyrazinyl) methyl.

Stem:

Saponins, phytosterols, tannins and carbohydrates were reported from stem.

Flower:

Quercetin, dination, querimetrin and an unidentified diglycoside of quercetin were reported from the flower.

GUNAPADAM ASPECT

[8]யானை நெருஞ்சில்

வேறு பெயர்	-	பெருநெருஞ்சில்
பயன்படும் உறுப்பு	-	செடி முழுமையும்

Organoleptic Character

Taste (சுவை)	-	Astringent, Sweet
Potence (தன்மை)	-	Coolant
Biotransformation(பிரிவு)	-	Sweet

Therapeutic Action

குளிர்ச்சியுண்டாக்கி	-	Cooling
சிறுநீர் பெருக்கி	-	Diuretic
உள்ளழலாற்றி	-	Demulcent
உரமாக்கி	-	Tonic
ஆண்மை பெருக்கி	-	Aphrodisiac
துவர்ப்பி	-	Astringent

Therpeutic effects of [plant Yaanai Nerunjil] is explaned as

- மேகம்
- வெண்புள்ளி
- கல்லடைப்பு
- எலும்புருக்கி நோய்
- உடம்பு உரிச்சல்

[8] குணபாடம் மூலிகை வகுப்பு (பொருட் பண்பு நூல்) பக்க எண்: 596

- நிர் வேட்கை
- அழல் நீங்கும்

இதனை அகத்தியர் குணவாகடத்தில்.

"மேகத்தைப் போக்கிவிடும் வெண்குட்டந் தானொழிக்குத்
தேகத்திற் கல்லடைப்பைத் தீர்க்குணங்கான்- நாகத்தாந்
தேனையரும் பாகைத் திருத்துங் கிளிமொழியே
யானை நெருஞ்சி லுது."

"யானை நெருஞ்சி லுதுசீ தளமாகும்
மானே எலும்புருக்கி மாற்றங்காண்-மேனிதனில்
உள்ள எரிச்சல் உழலையுள் தாகமொடு
தள்ளு பித்த மும்போக்குந் தான்"

யானை நெருஞ்சில் சேரும் மருந்துகள்

1. [9]சதாவேரியாதி கிருதம்

சேரும் சரக்குகள்

நெய் - 20 பலம்

தண்ணீர்விட்டான் கிழங்கு இரசம் - 32பலம்

ஆட்டு பால் - 64 பலம்

சிறு நெஞ்சில் **யானை நெருஞ்சில்,** சீந்தில் கொடி, பூணை காய்ஞ்சொறி, குசதர்ப்பை, முள்ளங்கை இவைகளில் இரங்கள் -2 பலம் இவைகள் யாவையும் ஒன்றாக கலந்து அதில் அதிமதுரம் திரிகடுகு நெருஞ்சில் காய், சிறுபீளை, சிலாசத்து, தால் சிம்மி, ஏலக்காய் இலவங்கபத்திரி.

இவைகளை வகைக்கு ½ பலம் விகிதம் சூரணத்தில் போட்டு சர்க்கரை-2 பலம் சேர்த்து, கிருத பக்குவமாக காய்ச்சி, பிறகு தேன் கலந்து சாப்பிட்டால், மூத்திரகிரிசரம், மூத்திரதோஷம், இவைகள் நீங்கும்.

2. [10]பாஷாணபேதி கியாழம்

சேரும் சரக்குகள்

- சிறுபீளை
- நெருஞ்சில்
- ஆமணக்கு வேர்
- கண்டங்கத்திரி வேர்

[9] அனுபவ வைத்திய தேவ ரகசியம் பக்கம் எண் 530
[10] அனுபவ வைத்திய தேவ ரகசியம் பக்கம் எண் 532

- முள்ளங்கத்திரி வேர்
- **யானை நெருஞ்சில் வேர்**

தீரும் நோய்கள்

இவைகளை கியாழம் வைத்து தயிர் கலந்து சாப்பிட்டால்

- முத்திரகாதம்,
- சுக்கில தோஷம்,
- பயங்கரமாகிய நீர் அடைப்பு,
- சக்கரா அச்சுமரி,

இவைகள் நிவர்த்தியாகும்.

3. [11]வெடியுப்பு கட்டு

அளவு : 2-4 குன்றி

துணை மருந்து : **யானை நெஞ்சில்** தண்ணீரில் எடுத்த கோழை

தீரும் நோய் : நீர் கட்டு , நீர் அடைப்பு , சதை அடைப்பு கல்லடைப்பு , குன்மம், வயிற்று வலி வாயு

4. [12]வில்லையிப்பு:

அளவு : 1 ¼ -2 ½ வராகன்

துணைமருந்து : **யானை நெருஞ்சில்** கோழை

தீரும் நோய் : நீர்கட்டு, நீர் எரிச்சல், எரிச்சலான மேகங்கள்

[11] அனுபோக வைத்திய நவநீதம் பாகம் -III Page No:77
[12] அனுபோக வைத்திய நவநீதம் பாகம் -III Page No:79

[13]கல்லடைப்பு

வேறுபெயர்:

அச்சமரி

இயல்பு:

சிறுநீர் கழிக்குங்கால் அஃது இறங்கி கொண்டிருக்கும் போதே தீடீரென நீரடைத்தல், குறிமுனை நோதல், நீர்புழை எரிதல், இடுப்பின் பின்புறத்தும், முதுகுத் தண்டின் பக்கத்தும் நோதல், சிறுநீரில் மணலொத்த சிறு கற்கள் கலந்திருத்தல் ஆகிய தன்மைகளை உடையதாம்.

நோய் வரும் வழி:

- சுனைநீர்
- பன்னாட்கள் தேங்கிய நீர் இவைகளைப் பருகுவதாலும்,
- மாப்பண்டம்
- வளிக்குற்றத்தை மிகுதிபடுத்தும் உணவு முதலியவற்றை உண்பதாலும் விந்து கட்டுபடுபவதாலும் இந்நோய் பிறக்கும்

இதனை,

"கலங்கினதோர் தண்ணீர்தான் குடித்த பேர்க்குக்
கல்லெலும்பு மயிர்மண்தான் கலந்தன் னத்தில்
அலங்கியதோ ரன்னங்க னருத்த லாலும்
அருகலொடு பழம்பண்ட மருந்தலாலும்
மலங்கினதோர் மாப்பண்ட மருந்தலாலும்
மந்தத்தில் வாயுவாம் பதார்த்தந் தன்னனத்
துலங்கினதோ ருசிதன்னிற் சுவைத்த லாலும்
சுருக்காய்க்கல் லடைப்பு வந்து தோன்றுந்தானே".

[13] பொது மருத்துவம் பக்க எண்: 461

நோய்குறி குணங்கள்:

1. அடிக்கடி வெளியாகும் நீர் முற்றும் வெளியாகாமல் திடீரென அழைத்து கொள்ளுதல்.
2. அப்போது தாங்க முடியாத வலியானது ஆண்குறியிலும் எருவாய்க்கு மேற்பகுதிலும் உண்டாகும்.
3. சில வேளையில் கல்புரண்டு கொண்டே வந்து வெளியாவதற்கு முயன்று ஆண்குறி முனையில் வந்து தடைபட்டு அங்கு மிகுந்த வலியையும் வீக்கத்தையும் உண்டாக்கும்.
4. கற்கள் கரடுமுறடாயேனும் கூர்மையாயேனும் இருப்பினும் கீழ் வயிற்றிலும், நீர்புழையிலும் தாங்கமுடியாத எரிச்சலையும் வலியையும் தந்து குருதி மிகவும் வெளிப்படும்.

குற்ற முதலிய வேறுபாடுகள்:

உணவு, நீர் முதலியவைகளால் தீக்குற்றம் மிருந்து உடல்நீரை சுண்டச் செய்து , சிறுநீரத் வற்றி, நீரின் உப்பைஉறைய செய்தும் கீழ்நோக்குகால் வன்மை இழந்து இந்நோயை பிறப்பிக்கும்.

[14]RENAL CALCULI

Definition

A kidney stone is a hard, crystalline mineral material formed within the kidney or urinary tract. Kidney stones are a common cause of blood in the urine (hematuria) and often severe pain in the abdomen, flank, or groin, kidney stones are sometimes referred to as renal calculi.

Predisposing factors for kidney stones

Environmental and Dietary

Low urine volume	:	High ambient temperature, low fluid intake
Diet	:	High protein, high sodium, low calcium

High sodium excretion

High oxalate excretion

High urate excretion

Low citrate excretion

Acquired causes

Hyper calcaemia of any cause

1.With normal or elevated (ie inappropriate) PTH levels.

- Primary or Tertiary hyperparathyroidism
- Familial hypocalcuric hypercalcaemia

[14] Davidson's Principles and Practice of Medicine page 632

2.With low (ie suppresed) PTH levels

- Malignancy (eg. Lung, breast, renal, ovarian, colonic and thyroid carcinoma, lymphoma, multiple myeloma)
- Elevated 1,25(OH)2 vitamin D (vitamin D intoxication, sarcoidosis, HIV other granulomatous disease)
- Thyrotoxicosis
- Paget's with immobilization
- Milk - alkali syndrome
- Gluco corticoid deficiency

Congenital and Inherited causes

- Familial hypercalciuria
- Medullary sponge kidney
- Cystinuria
- Renal tubular acidosis
- Primary hyperoxaluria

Morphology

Calcium stones

- usually small, ovoid (less than a cm)
- hard with granular rough surface
- Dark brown due to old blood pigment deposited in them as a result of repeated trauma caused to the urinary tract by these sharp - edged stones.

Mixed (Struvite stones)

- Yellow - white or grey
- Soft and friable and irregular in shape
- Stag-horn stone which is a large, solitary stone that takes the shape of renal pelvis.

Uric acid stones

Smooth, yellowish-brown, hard and often multiple

Cystine stones

Small, rounded, smooth and often multiple. Yellowish and waxy.

LATERAL REASEARCH WORK

1. Effect of Ethanolic fruit entract of pedalium murex Linn in Ethylene Glycol induced urolithiarsis in male wister albino rats.Journal : Ancient Science of life PUB Med Central Canada
2. Aldose reductase inhibitory activity of alcoholic entract of Pedalium murex Linn fruit.Asian Pacific Journal Of Tropical biomedicine. Volume -2 isse1Supplement Jan2012.
3. A Comparative study of ethanolic extracts of pedalium murex Linn fruits & sildenafil citrate on sexual behaviours and serum testosterone level in male rats during and after treatment. Journal of ethanopharmacology Volume 143, issue 1,30 Aug 2012.
4. Pedalium murex Linn fruits - A comparative antioxidant activity of its different fractions. Asian pacific journal of tropical bio medicine, volume 1, issue 5, oct 2011.
5. Anti hyperlipidemic activity of pedelium murex Linn fruits on high fat diet fed rats. International journal of pharmacology [4] 310-313, 2008
6. Anti microbial activity of petroleum ether and methnol extracts of pedalium murex leaves. Intermational journal pharmacological frontier research [IJPER] 2011, 1[1]: 1-10
7. Antidiabetic efficacy of leaves and callus of pedalium murex on Alloxan induced diabetic albinio rats. www.scribd.com

MATERIALS AND METHODS

Preparation of The Drug

The drug was prepared with reference from “Gunapadam mooligai vagupu’’ page 527.

Collection of test drug

Yaanai nerunjil was collected from the grass grounds near by ponnakudi .

Purification of the test drug

Foreign particles were removed from the collected Yaanai nerunjil and dried in shade.

Preparation of the test drug

The dried Yaanai nerunjil were ground into a fine powder and sieved by a white cotton cloth.

Purification of Chooranam

A pot was taken with equal quantity of milk and water. The mouth of the pot was covered with cotton cloth. The chooranam was kept over it and covered with a lid and a moist cloth was wound tightly round the lid and the rim of the pot. The contents were boiled till steam escapes, which means chooranam was well cooked and purified. Then the chooranam was taken and dried then powdered. This Chooranam was used within 3 months of preparation.

Dose **:** 1 gm twice a day after food

Adjuvant **:** water

Route of admisistration : Enteral route (oral)

This prepared Yaanai nerunjil chooranam was used for the following methods

- Biochemical analysis
- Pharmacological analysis
- Microbiological analysis
- Clinical studies.

PHYSICO-CHEMICAL ANALYSIS

PROCEDURES:

Total ash

Two grams of grounded air-dried material was accurately weighed in a previously ignited and tared silica crucible. The drug was gradually ignited by raising the temperature to 450°C until it was white. The sample was cooled in a desiccator and weighed. The percentage of total ash was calculated with reference to air-dried drug.

Acid Insoluble ash

The ash was boiled with 25 ml of 2 M hydrochloric acid for 5 minutes, the insoluble matter was collected on an ash less filter paper, washed with hot water, ignited, cooled in a desiccator, and weighed. The percentage of acid insoluble ash was calculated with reference to the air-dried drug.

Water Soluble ash

The ash was boiled with 25 ml of water for 5 minutes, the insoluble matter on ash less filter paper collected, washed with hot water, ignited, cooled in a desiccator, and weighed. The weight of the insoluble matter from the weight of the total ash was subtracted; the difference represents the water soluble ash. The percentage of water insoluble ash was calculated with reference to the air-dried drug.

Moisture content:

The shade-dried drug was grounded in a mixer grinder. The powder passed through #40 and retained on #120. Accurately weighed 10 g of # 40/120 drug powder was kept in a tared evaporating dish. This was dried at 105°C for 5 hours in tray drier and weighed. The drying was continued and weighing was done at one-hour interval until difference between two successive weighings corresponds to not more than 0.25 percent.

Drying was continued until a constant weight was reached with two successive weighings after drying for 30 minutes and cooling for 30 minutes in a desiccator was showing not more than 0.01 g difference.

Potential of Hydrogen (pH):

The pH scale is logarithmic and runs from 0.0 to 14.0 with 7.0 being neutral. Readings less than 7.0 indicate acidic solutions, while higher readings indicate alkaline or base solutions.

BIO - CHEMICAL ANALYSIS OF

YAANAI NERUNJIL CHOORANAM

Preparation of the Extract

5gms of Chooranam was weighed accurately and placed in a 250ml clean beaker. Then 50ml distilled water is added and dissolved well. Then it is boiled well for about 10 minutes. It was cooled and filtered in a 100ml volumetric flask and then it is made up to 100ml with distilled water. This fluid is taken for analysis

QUALITATIVE ANALYSIS

S. No	Experiment	Observation	Inference
1.	**Test for calcium** 2ml of the above prepared extract is taken in a clean test tube. To this add 2 ml of 4% ammonium oxalate solution.	No white precipitate is formed.	Absence of calcium.
2.	**Test for sulphate:** 2ml of the extract is added to 5% barium chloride solution.	A white precipitate is formed.	Indicates trace amount of sulphate.
3.	**Test for chloride** The extract is treated with silver nitrate solution.	No white precipitate is formed	Absence of chloride.

4.	**Test for carbonate** The substance is treated with concentrated Hcl.	No brisk effervescence is formed.	Absence of carbonate.
5.	**Test for Starch** The extract is added with weak iodine solution.	No blue colour is formed	Absence of starch.
6.	**Test for iron Ferric:** The extract is treated with concentrated glacial acetic acid and potassium ferro cyanide.	No blue colour is formed.	Absence of ferric iron.
7.	**Test of iron Ferrous:** The extract is treated with concentrated Nitric acid and ammonium thio cynate.	Blood red colour is formed.	Indicates the presence of ferrous iron.
8.	**Test for phosphate:** The extract is treated with ammonium molybdate and concentrated nitric acid.	Yellow precipitate is formed.	Indicates trace amount of phosphate.
9.	**Test for albumin** The extract is treated with Esbach's reagent.	No yellow precipitate is formed.	Absence of albumin.
10.	**Test for Tannic acid** The extract is treated with ferric chloride reagent.	No blue black precipitate is formed.	Absence of Tannic acid.
11.	**Test for unsaturation** Potassium permanganate solution is added to the extract.	It gets decolourised.	Indicate the presence of unsaturated compound.

12.	**Test for the reducing sugar** 5ml of benedict's qualitative solution is taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boil it for 2 mts.	No colour change occurs.	Absence of reducing sugar.
13.	**Test for amino acid:** One or two drops of the extract is placed on a filter paper and dried it well. After drying, 1% ninhydrin is sprayed over the same and dried it well.	No Violet colour is formed.	Absence of amino acid.

INFERENCE

The given sample of Yaanai nerunjil chooranam contains ferrous iron, Chloride, trace amounts of sulphate and phosphate.

[15]PHARMACOLOGICAL ANALYSIS

ANALYSIS OF LITHOTRIPTIC ACTIVITY OF YAANAI NERUNJIL CHOORANAM

Preparation of drug for dosing

All drugs used for the study was suspended each time with 1% (w/v) solution of sodium carboxy methyl cellulose before administration.

Drugs and chemicals

Fine chemicals used in these experiments were obtained from Sigma Chemicals Company, U.S.A. Other analytical grade chemicals were obtained from S.d. Fine Chemicals Ltd., Mumbai. Standard drug Cystone (Himalaya Drug Company product) procured from market.

Experimental animals

Colony inbred wistar rats of either sex weighing 200 - 250 g were used for the pharmacological and toxicological studies. The animals were kept under standard conditions 12:12 (day/night cycles) at 22^0C room temperature, in polypropylene cages. The animals were fed on standard pelleted diet (TANUVAS,Chennai) and tap water ad libitum. The animals were housed for one week in polypropylene cages prior to the experiments to acclimatize to laboratory conditions. The experimental protocol was approved by the Institutional Animal Ethical Committee (IAEC). (IAEC/XXXV/64/2012)

[15] Urolithiasis an Overview, Amercan college of Urology.

Acute oral toxicity study

Acute oral toxicity was conducted as per the OECD guidelines (Organization of Economic Cooperation and Development) 423 (Acute Toxic Class Method). The acute toxic class method is a stepwise procedure with 3 animals of a single sex per step. Depending on the mortality and /or moribund status of the animals, on the average 2-4 steps may be necessary to allow judgment on the acute toxicity of the test substance. This procedure results in the use of a minimal number of animals while allowing for acceptable data based scientific conclusion.

The method uses defined doses (5, 50, 300, 2000 mg/kg body weight) and the results allow a substance to be ranked and classified according to the Globally Harmonized System (GHS) for the classification of chemicals which cause acute toxicity

.Female Wistar albino rats weighing 200-250 g were fasted overnight, but allowed water ad libitum. Wistar albino rats of either sex weighing 200-250 g were fasted overnight, but allowed water ad libitum. Since the formulation is relatively nontoxic in clinical practice the highest dose of 2000 mg/kg/p.o (as per OECD guidelines “Unclassified”) was used in the acute toxicity study.

The animals were observed closely for behavioral toxicity, if any by using FOB (Functional observation battery).

Repeated oral toxicity study

Repeated oral toxicity studies can be used to get additional information regarding the toxicity profile of a chemical. Repeated oral toxicity studies are defined as those studies where the chemical is administered to the animal for a period covering approximately 10% of the expected life of the animal. Usually, the dose levels are lower than for acute studies and allow chemicals to accumulate in the body before lethality occurs, if the chemical possess this ability.

Experimental procedure

The following experimental procedure was followed to evaluate the repeated oral toxicity study of YNC

Group I : *Control animals received 1%CMC, 2 ml/kg/p.o. for 28 days

Group II : *Received YNC at the dose of 180mg/kg/po in 1%CMC for 28 days

The dose for rats was calculated by multiplying the daily dose used in the clinical practice(i.e.1000mg BID=2000mg/day) divided by a factor 0.018 corresponding to the body surface area of man weighing 70kg to rat weighing 200g.

Single dose 1000mg, Daily dose 2000mg x 0.018 =36mg for a rat weighing 200g. Multiply the rat dose for a rat weighing 200g x5 to get the dose for kg.body weight of rat (i.e.36mg x 5=180mg/kg/po)

Group I and II animals used for the chronic toxicity study for 28 days were part of the animals used in the experimental protocol for the urolithitic study of YNC(Table-1&2). Blood samples were collected at the end of 28 days from the respective groups to study the biochemical and hematological parameters

Body weight, food intake and water intake was recorded at two intervals with simultaneous observation for toxic manifestation and mortality, if any. At the end of 28 days treatment blood samples were collected by retro orbital puncture and used for hematological studies and serum was used for biochemical studies

Biochemical studies

Aspartate aminotransferase (AST)

Aspartate aminotransferase was estimated using commercial AST kit (Span Diagnostics) by the method of (2).

Alanine aminotransferase (ALT)

Alanine aminotransferase was estimated using commercial AST kit (Span Diagnostics) by the method of Reitman(2).

Alkaline phosphatase (ALP)

Alkaline phosphatase was assayed using commercial ALP kit (Span Diagnostics) by the method of King (3)

Hematological studies

Erythrocyte count

Erythrocyte count was estimated by Hem cytometer method of Ghai (4).

Total Leukocyte Count (WBC)

Total Leukocyte Count was estimated by Hem cytometer method of John (5)

Hemoglobin

Hemoglobin was estimated by method of Ghai (4).

Experimental animals

Male albino rats of wistar strain weighing between 200-250gm were used, the animals were fed with commercial rat feed pellets(Tanuvas,Chennai) and water ad libitum.Animals were housed in plastic cages with filter tops under controlled conditions of 12:12 light dark cycle, 50 humidity and 28 c. All animal experiments and maintenance were carried out according to the ethical guidelines suggested by the IAEC of C.L.Baid Metha College of Pharmacy, Chenna

Anti urolithiatic activity

Group-1 received the 1% CMC (vehicle) at the dose of 10ml/kg/po and served as normal control

Group-2 received Ethylene glycol (0.75%) daily orally mixed with drinking water for 28 days

Group-3 received Ethylene glycol (0.75%) daily orally in drinking water and YNC 180mg/kg/po orally daily for 28 days

Group-4 received Ethylene glycol (0.75%) daily orally in drinking water and Cystone 500mg/kg/po orally daily for 28 days

Group-5 received YNC alone as 1% suspension in CMC at the dose of 180mg/kg/po orally daily for 28 days

All drugs were suspended in CMC daily before use. All drugs were given once daily by oral route using blunt metal needle fitted with PVC tube. At the end of experimental period blood was collected by retro orbital puncture and transferred to tubes containing sodium citrate. Serum was separated and used for the analysis of calcium, magnesium, oxalate, inorganic phosphate, using standard experimental procedures.(6)

Assessment of Antiurolithiatic Activity

Collection

All the animals were kept in individual metabolic cages and urine samples of 24 h were collected on the 28th day. Animals had free access to drinking water during the urine collection period. A drop of concentrated hydrochloric acid was added to the urine before being stored at 4°C. Urine was analysed for calcium, phosphate, and oxalate content using the method of Bahuguna et al. (7)

Serum analysis

After the experimental period, blood was collected from the retro-orbital under anaesthetic condition and animals were sacrificed by cervical decapitation. Serum was separated by centrifugation at 10000 × g for 10 min and analysed for creatinine, uric acid (8)

Urine volume and analysis of urine

Animals were placed in separate metabolic cages for 24 h and total urinary volume was measured using the measuring cylinder and reported in ml and urea nitrogen using the method of Atef and Attar.(9)

Urine pH

Uric acid crystals were found to deposit most frequently in the concentrated acid urine. Thus, the acidity of the urine was tested using the pH meter. (9)

Statistical Analysis

Statistical evaluation was done using Student “t” test. Statistical significant was set at $P < 0.05$. Results are presented as mean ± standard error of mean (SEM).

Results

Acute oral toxicity study

YNC at the dose of 2000mg/kg/po did not exhibit mortality in rats., hence further study with higher dose was not performed with YNC.

According to OECD guidelines the drug is identified as “Unclassified “under the toxicity scale.

Repeated oral toxicity for 28 days

Test drug YNC at the dose of 180mg/kg/po when administered orally for 28 days in rats did not show significant toxicity in Hematological(Table-1), liver and kidney function tests (Tables, 2).

Lithotriptic effect of YNC

Administration of 0.75% Ethylene glycol (EG) for 28 days in drinking water resulted in hyperoxaluria in rats as evidenced by the results of the study. Oxalate, calcium and phosphorous excretion were increased in EG treated rats. The blood urea nitrogen and serum creatinine levels were increased in rats treated with EG.

Administration of the test drug YNC at the dose of 180mg/kg/po for 28 days concurrently with EG significantly lowered the levels of oxalate, calcium and phosphorous in urine when compared to EG alone treated rats. The results of test drug YNC can be compared to that of standard drug Cystone. The treatment with YNC also significantly reduced the elevated levels serum creatinine and Blood urea nitrogen, evidently proves the protective action of YNC against EG induced urolithiasis in rats. Histopathological study of kidney showed the lesser nucleation of oxalate crystals in YNC treated animals when compared to untreated animals. Urine volume was increased in animals treated with

YNC and cystone with an acidic pH and this may be accounted for the reduced crystallization of oxalate and expedited elimination from the urine

The test drug YNC alone at the dose of 180mg/kg/po administered for 28 days to evaluate the toxicity, if any per se on long term use did not show evidence of liver, kidney injury and hematopoietic system toxicity.

HP slides of kidney

Microscopic examination of kidney section derived from EG induced urolithic rats showed (Plate-2) irregular crystal deposits inside the tubules when compared to Control animals (Plate-1) which causes dilation of the proximal tubules along with interstitial inflammation thus might be attributed to oxalate formation

The presence of such deposits is an evidence of adhesion and retention of crystals with in renal tubules. EG induced urolithic rats treated with cystone and test drug had increased the solubilisation of oxalate crystals (Plate-3 and Plate-4) and restored the normal architecture of kidney.

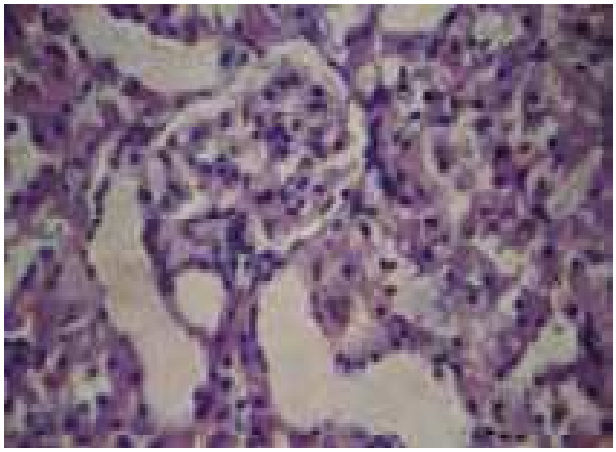


Plate-1 Normal control animal(kidney section)

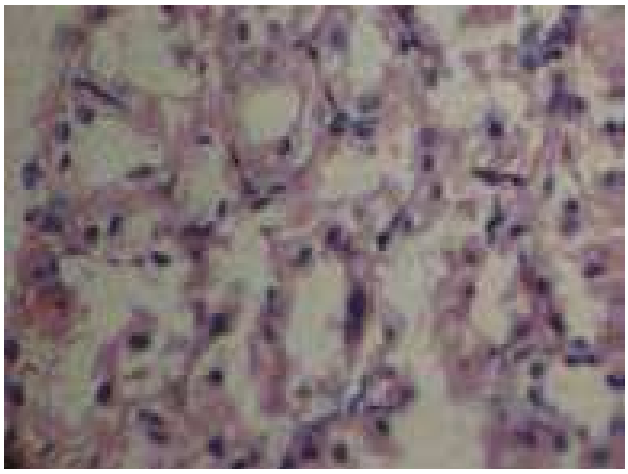


Plate-2 Animals treated with EG x 28 days(kidney section)

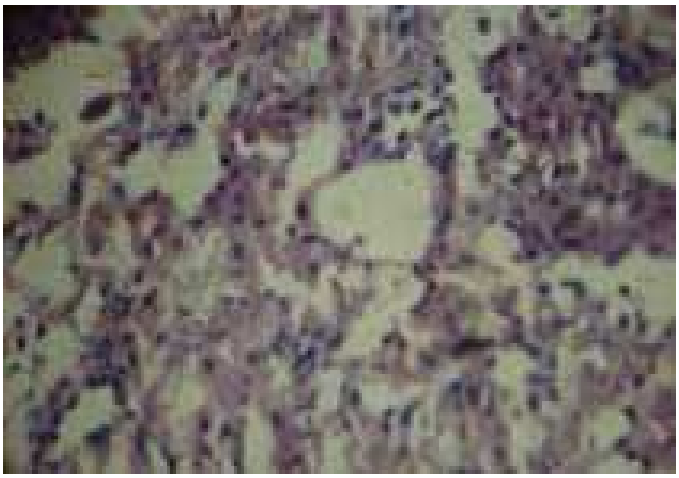


Plate-3 Animals treated with EG+Cystone for 28 days(kidney section)

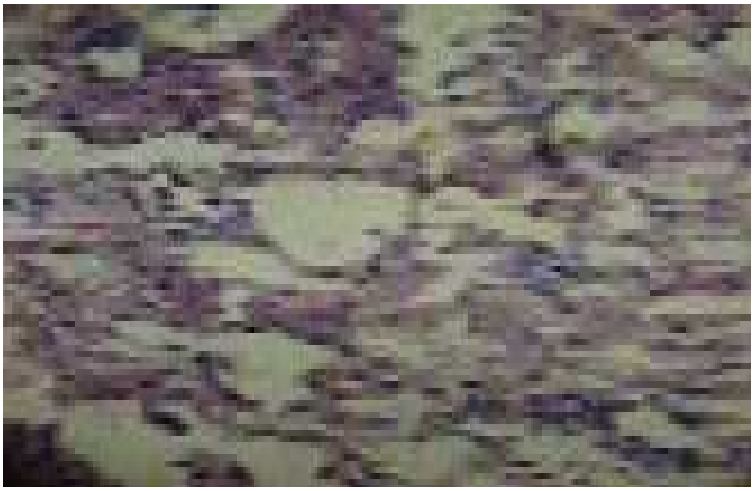
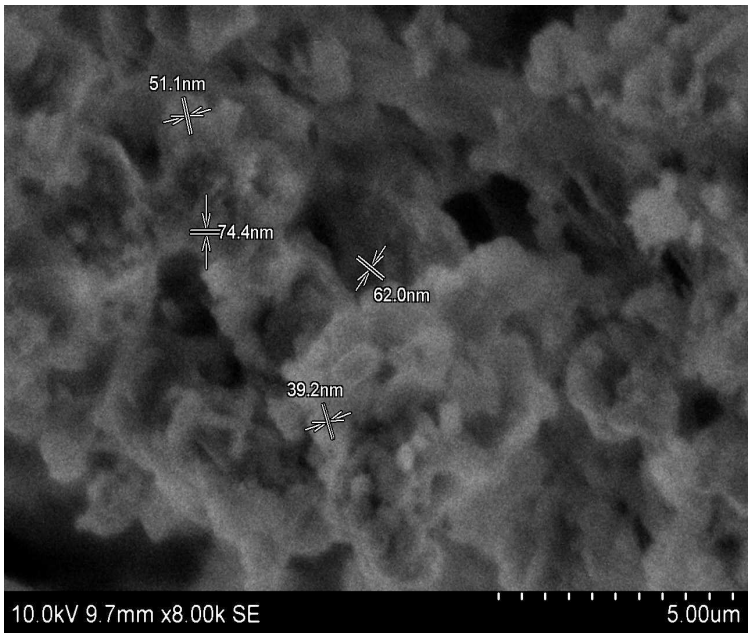


Plate-4 Animals treate with EG+YNC for 28days(kidney section)

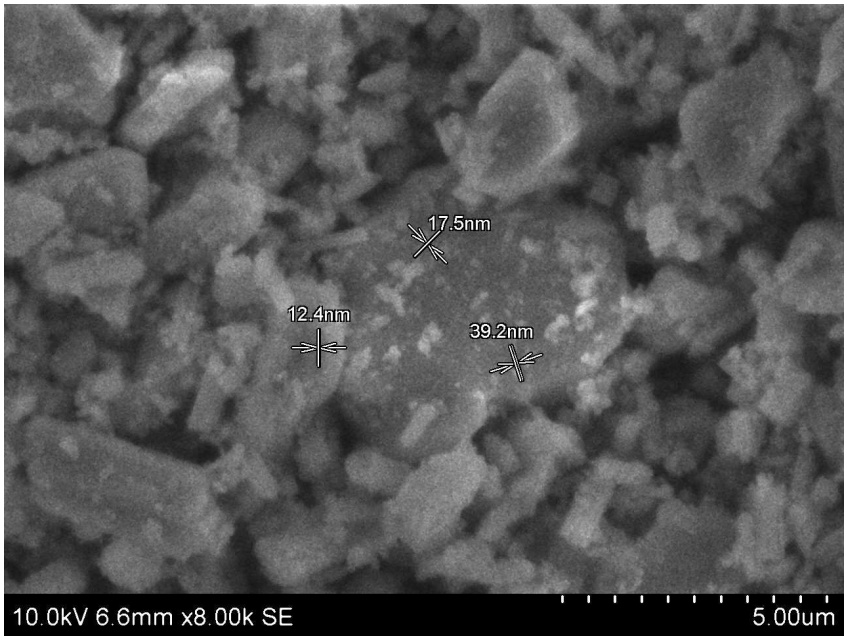
யானை நெருஞ்சில் - Pedalium Murex

SEM Analysis of Yaanai Nerunjil Chooranam



Micro Graph particle size ranges in 56.675 nm

SEM Analysis of Mandoora Chenduram



Micro Graph particle size ranges in 23.06 nm

Table -1

Effect of Siddha Formulations (YNC) on hematological parameters after 28 days repeated oral dosing (180 mg/kg)

Groups	Hb (gm/ 100ml)	RBC (millions /cu.mm)	WBC (cells/ cu.mm)	Differential leucocyte count (%)		
				Lympho cytes	Mono cytes	Granulo Cytes
Normal	13.23 ± 0.56	4.59 ± 0.565	5650.08 ± 9.43	76.06 ± 3.27	5.610 ± 1.27	19.84 ± 4.647
YNC 180mg/ kg/po	14.01 ± 0.021 ^{ns}	5.88 ± 0.021 ^{ns}	6066 ± 0.813	75.07 ± 1.04 ^{ns}	5.04 ± 0.58 ^{ns}	20.06 ± 0.31 ^{ns}

n=6; Values are expressed as mean ± S.E followed by Students Paired'T'Test; ns – Non significant when compared to control groups

Table-2

Effect of Siddha formulation (YNC) on Biochemical markers of liver and kidney after 28 days repeated oral dosing (180 mg/kg/po) in rats

Groups	AST (IU/L)	ALT (IU/)	ALP (IU/L)	BUN (mg/dl)	Creatinine (mg/dl)
Normal	72.64 ± 0.349	30.64 ± 0.821	158.45 ± 0.64	30.16±1.45	0.70±0.01
YNC (180mg/kg)	77.40 ± 0.06	31.13 ± 0.604	150.25 ±0.45ns	34.01±0.01 ns	0.80±0.65ns

N=6; Values are expressed as mean ± S.E followed by Students Paired 'T' Test

Ns – non significant when compared to control groups

Table-3

Effect of on Urinary level of Oxalate, calcium and phosphate after treatment with YNC (180mg/kg/po) in EG induced Urolithiasis

Group and dose	Oxalate(mg/g)	Calcium (mg/g)	Phosphate (mg/g)
Group-1 Normal control	0.32±0.052	0.36±0.31	3.77±0.07
Group-2 Urolithic control	3.94±0.61***a	4.28±0.19***a	7.02±0.05***a
Group-3 Cystone (500mg/kg/po)treated	0.48±0.02***b	1.44±0.01***b	3.31±0.02***b
Group-4 YNC(180mg/kg/po) treated	0.81±0.02***b	1.89±0.02***b	3.94±0.65***b

N=6; Values are expressed as mean ± S.E followed by Students Paired 'T' Test

Ns – non significant when compared to control groups

a: group 1 vs group 2

b:group 2 vs groups 3,4

***p<0.001

Table-4

Effect of YNC on BUN, Serum creatinine and Uric acid levels in ethylene glycol induced urolithiasis

Groups	Serum prameters(mg/dl)		
	Blood urea nitrogen (BUN	**Cretinine**	**Uric acid**
Group-1 Control	30.16±1.45	0.70±0.01	1.42±0.031
EG treated aniamls	48.12±1.23***a	1.43±0.02***a	1.99±0.05***a
Cystone	37.40±1.89***b	0.87±0.01**b	1.41±0.06***b
YNC	35.08±1.05***b	0.74±1.03***b	1.67±0.01**b

n= 6 animals values mean±SEM,** p<0.01 ***p<0.001

a: Control(group-1) vs. Ethylene glycol induced urolithitic rats(group-2)

b: Goup-2 vs. group 3 and 4

Table-5

Effect of YNC on volume of urine and pH of urine in ethylene glycol induced urolithiasis

Groups	**Total volume of urine(ml)**	**pH of urine**
Group-1 Control	2.10±0.12	7.20±0.06
EG treated	1.34±0.12***a	8.9±0.07***a
Cystone	4.05±0.31***b	7.21±0.32***b
YNC	4.60±014.***b	6.91±0.20***b

n= 6 animals values mean±SEM,** p<0.01 ***p<0.001

a: Control(group-1) vs Ethylene glycol induced urolithitic rats(group-2)

b: Goup-2 vs group 3 and 4

ANALYSIS OF DIURETIC EFFECT OF YAANAI NERUNJIL CHOORANAM

Aim

To evaluate the diuretic effect of YAANAI nerunjil chooranam.

Preparation of the test drug

1gm of Yaanai nerunjil extract was dissolved in 10ml of distilled water, thus 1ml contains 100mg of Yaanai nerunjil extract.

Procedure

The method of lipschitiz et.al was employed for the assessment of diuretic activity. Groups of 9 male albino rats, each weighing 80-120gm were fasted and deprived of water for18 hours prior to the experiments. They were divided into 3 equal groups of 3 rats each and put into 3 different metallic cages. On the day of the experiment all the animals were given normal saline orally 2.5ml/ 100gm body weight. Group I served as the negative control which received only normal saline 2.5ml/100gm. Group II received Frusemide 2mg/ 100gm as reference diuretic and Group III received test drug at a dose of 100mg/ 100 gm orally, 1 hour prior to the administration of normal saline.

Immediately after dosing, the animals were placed in metabolic cages specially designed to separate urine and faeces and kept at room temperature of $25^0 \pm 0.5^0$ C. The urine was collected in measuring cylinder upto 5 hours after dosing. During this period no water and food

was made available to the animals. The total volume of urine collected was measured for the control and treated groups.

Diuretic effect of Yaanai nerunjil chooranam

S.No.	Name of the Drugs/Groups	Dose /100gram body weight	After Drug Administration		
			1 ½ hour	3 hours	4 ½ hours
1.	Control (Saline)	5ml	3.0ml	5.0ml	6.0ml
2.	Yaanai nerunjil chooranam	100mg	3.0ml	6.0ml	10.0ml

Inference

From the above experiment, it was inferred that the drug extract of Yaanai nerunjil chooranam has got significant diuretic action.

ANTI-SPASMODIC EFFECT OF YAANAI NERUNJIL CHOORANAM ON ISOLATED RABBIT ILEUM

Aim

To find out the anti-spasmodic effect of Yaanai nerunjil chooranam on isolated Rabbit ileum.

Preparation of the test drug

1gm Yaanai nerunjil chooranam was dissolved in 10 ml of water and boiled for 15 minutes. The filtrate was used for the experiments.

Solutions required

- Acetyl- choline -10mg/ml
- Homatropine 10mg/ml
- Test Drug Yaanai nerunjil chooranam 1gm /ml.

Nutrient solution

Tyrode-1 to 2 litres

Tissue used

Rabbit ileum

Apparatus required

Student's Organ bath, Sherrington rotating drum.

Procedure

A Rabbit was starved for 48 hours and was allowed water ad-libitum. It was sacrificed by a blow on the head and by carotid bleeding. The abdomen was quickly opened and the ileo-caecal junction was found

out. A small piece of ileal portion was cut, removed and placed in a dish containing warm aerated Tyrode solution. The lumen of the ileum was gently rinsed out by pushing Tyrode solution into it. 3 cms length segment was cut from this part of ileum and was tied with thread on both ends without closing the lumen and the tissue was mounted in the organ bath containing Tyrode solution maintained at 37^0 C bubbled with air by an oxygen tube.

First the drum was allowed to run for 1 minute from the baseline. Drugs were given to study the inhibiting effect of Acetyl - choline. 0.2ml (10mg/ml)of Acetyl- choline was added and allowed to run the drum for 30 seconds. Thus the tissue was standardised and then the drum was stopped and the Acetyl - choline was washed out.

Again the Tyrode solution was added to the organ bath till the lever comes to the baseline. The drum was allowed to run for 1 minute.

To the organ bath 1 ml of test drug and 0.2 ml (10mg/ml) Acetyl - choline was simultaneously added and the drum was allowed to run for 30 seconds. The response was recorded. Then the drum was stopped and the Acetyl - choline solution and test drug solutions were washed out. Then the above experiment was done for 0.2ml dose of Acetyl - choline. The drum was allowed to run for 30 seconds. The response was recorded.

Then 0.2 ml of Homatropine and 0.2ml of Acetyl - choline was added and the drum was allowed to run for 30 seconds. There is no elevation in the graph and it seems to be at a baseline. Then 0.2ml of Acetyl - choline was added to standardise the tissues. Then the tracing was labelled and fixed.

Inference:

From the graph it is inferred that the test drug antagonize the effect of Acetyl - choline when added together. So the Yaanai nerunjil chooranam has got significant anti-spasmodic activity.

ANTI-MICROBIAL (BACTERIAL) ACTIVITY OF YAANAI NERUNJIL CHOORANAM

Aim

To identify the anti-microbial (Bacterial) activity of Yaanai nerunjil chooranam against Streptococcus, Staphylococcus, Proteus, Psuedomonas, E.coli.

Medium : Muller Hinton agar

Components of Medium

Beef extract	:	300gms /lit
Agar	:	17gms /lit
Starch	:	1.50gms /lit
Casein Hydroxylate	:	17.50gms /lit
Distilled Water	:	1000 ml
pH	:	7.6

Procedure

The media was prepared from the above components and poured and dried on a Petri dish. The organism was streaked on the medium and the test drug (1 gm drug in 10 ml of Water) was placed on the medium. This is incubated at 37^0C for one over night and observed for the susceptibility shown up clearance around the drug.

KIRBY BAUER ANTIMICROBIAL SUSCEPTIBILITY METHOD

RESULT TABLE

S. No	Test Drug	Organisms (Culture)	Susceptibility
1	Yaanai Nerunjil Chooranam	Escherichia coli	Sensitive
2		Klebsiella	Resistant
3		Proteus	Resistant
4		Staphylococcus aureus	Moderatively sensitive
5		Streptococcus pneumonia	Resistant
6		Pseudomonas aeruginosa	Resistant
7		Candida albicans	Resistant

Result

The test drug Yaanai nerunjil chooranam is Sensitive to E. Coli and Moderatively sensitive to Staphylococcus aureus.

SCANNING ELECTRON MICROSCOPE

Resolution :

1.2 nm gold particle separation on a carbon substrate

Magnification :

From a min of 12x to greater than 1, 00,000 X

The Scanning Electron Microscope (SEM) is a microscope that was electrons rather than light to form an image. There are many advantages to using the SEM instead of a light microscope.

The SEM has a large depth of field, which allows a large amount of the sample to be in focus at one time.

The SEM also produces images of high resolution, which means that closely spaced features can be examined at a high magnification. Preparation of the samples is relatively easy since most SEM one require the sample to be conductive.

The combination of higher magnification, larger depth of focus, greater resolution, and easy of sample observation marks the SEM one of the most heavily used instruments in research areas today.

FOURIER TRANSFORM INFRARED SPECTROSCOPY (FTIR)

INSTRUMENT DETAILS:

Model : Spectrum one : FTIR Spectrometer

Scan Range : MIR 450-4000 cm-1

Resolution : 1.0 cm-1

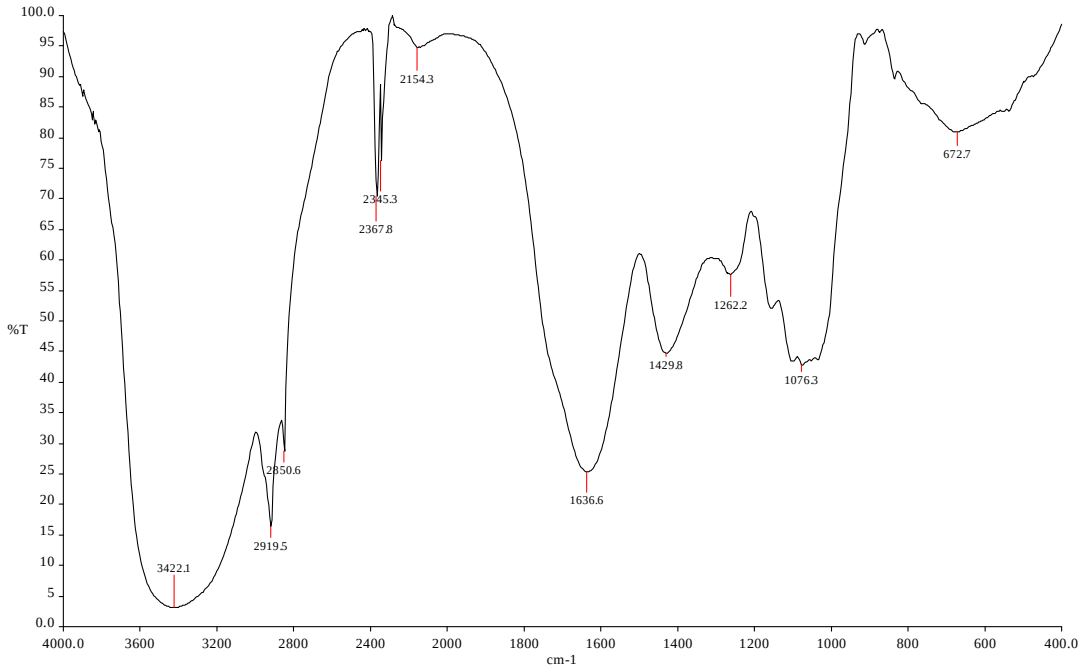
Sample required: 50 mg, solid or liquid.

Fourier Transform Infrared Spectroscopy (FTIR) is an analytical technique used to identify mainly organic materials. FTIR analysis results in absorption spectra which provide information about the chemical bonds and molecular structure of a material. The FTIR spectrum is equivalent to the "fingerprint" of the material and can be compared with cataloged FTIR spectra to identify the material.

FOURIER TRANSFORMS INFRARED SPECTROSCOPY

ANALYTICAL CAPABILITIES:

- Identifies chemical bond functional groups by the absorption of infrared radiation which excites vibrational modes in the bond
- Especially capable of identifying the chemical bonds of organic materials Detects and Identifies organic contaminants Identifies water, phosphates, Sulphates, nitrates, nitrites, and ammonium ions.



~1.SP 3601 4000.0 400.0 3.1 100.0 4.0 %T 4 2.0

PT

REF 4000 97.4 2000 97.0 600

3422.1 3.1 2919.5 16.2 2850.6 28.7 2367.8 70.3 2345.3 76.1

2154.3 94.7 1636.6 25.3 1429.8 44.7 1262.2 57.5 1076.3 42.8

672.7 80.9

END 11 PEAK(S) FOUND

Comments:

- 672- alkyl groups
- 1076- hydroxyl (OH), anhydride, ether group
- 1262- C-O stretching vibration
- 1429- keto group or C-H assymetric deformation

- 1636-C=C stretching vibration
- 2154-alkynes or aldehydic C-H
- 2345 and 2367- is due to acid group
- 2919 and 2850- C-H stretching vibration and saturated alkane
- 3422-O-H stretching vibration is due to phenolic compound of 2-(5,6-dimethyl pyrazinyl) methyl, present in the root of the plant or 2', 4', 5' trihydroxy-5,7-dimethoxy flavones present in the fruit.

CLINICAL ASSESSMENT

Cases for clinical trial of Lithotriptic effect on Kalladaippu Noi were selected from the out patient department of the Government Siddha Medical College Hospital, Palayamkottai.

The patients were selected as Kalladaippu Noi according to the following criteria.

DESIGN OF THE STUDY:

Open clinical trial, Phase II B

INCLUDING CRITERIA

- ❖ Pain abdomen
- ❖ Pain in the loin radiating to groin
- ❖ Intermittent dull pain in the loin
- ❖ Burning micturition.
- ❖ Dysuria
- ❖ Haematuria
- ❖ Increased frequency of micturition
- ❖ Nausea
- ❖ Vomiting
- ❖ Presence of crystals in the urine
- ❖ Ultrasonogram of abdomen and pelvis with positive results for Kalladaippu Noi.

EXCLUDING CRITERIA

- ❖ Renal calculus with renal failure
- ❖ Renal calculus with acute severe colic pain associated with severe vomiting
- ❖ Renal calculus found along with malignancy of kidney
- ❖ Ureteric calculus with urethral obstruction

The trial was done on 20 patients of different age and both sexes.

PARAMETERS FOLLOWED

The clinical condition was diagnosed and confirmed on the basis of clinical signs and symptoms, lab investigation and ultrasonogram of abdomen and pelvis and routine investigation like

BLOOD ANALYSIS

- ❖ Blood sugar
- ❖ Urea
- ❖ WBC/ TC, DC
- ❖ ESR
- ❖ Hb

URINE ANALYSIS

- ❖ Albumin
- ❖ Sugar
- ❖ Deposits

were done in laboratory of Government Siddha Medical College Hospital, Palayamkottai before and after treatment.

LINE OF TREATMENT

The patients were orally administered YAANAI Nerunjil chooranam in a dose of 1 gm along with water twice a day after food.

Ultrasonogram abdomen and pelvis, clinical Pathological examination were carried out before and after treatment. The clinical improvements were recorded for every seven days.

Instructions

- Not to take any other lithotriptic drug of any other system whether indigenous or modern, when they were trial.
- Incidental ailments were treated with appropriate Siddha medicine.
- Advised to attend out patients department every week Thursday for the collection of medicine, clinical examination and lab investigation.

உணவு முறைகள்

- முள்ளங்கி, சுரைக்காய், வெள்ளரிக்காய், வாழைத்தண்டு, சிறுபீளை முதலியவைகளை சாறாகவோ, நெருஞ்சில், மாவிலிங்கப் பட்டை, காணப்பயிறு (கொள்ளு) முதலியவைகளைக் குடிநீராகவோ சேர்த்துக் கொள்ள அறிவுறுத்தப்பட்டது.

- சுண்ணச்சத்து (Calcium) அதிகமாக உள்ள பசலைக்கீரை, அகத்திக்கீரை முதலியவைகளையும் தக்காளி, முட்டைகோஸ், காலி/பிளவர், பிளம்ஸ்,ஸ்ட்ரா-பெரி(Strawberry) முதலியவைகளையும் உணவில் குறைவாக சேர்க்க அறிவுறுத்தப்பட்டது.
- உணவில் பால் மற்றும் பால் சேர்த்து செய்யப்படும் உணவுப்பண்டங்களை குறைக்க அறிவுறுத்தப்பட்டது.
- அசைவ உணவுகளான மீன், மாமிசம், முட்டை, குடல், ஈரல், மூளை போன்றவற்றை அடிக்கடி உணவில் சேர்த்து கொள்வதை தவிர்க்க அறிவுறுத்தப்பட்டது.
- முக்கியமாக Vitamin A சத்து குறைபாடு இல்லாமல் பார்த்துக் கொள்ள வேண்டும். இச்சத்து மிகுதியாக உள்ள பப்பாளி, கொய்யா, தர்ப்பூசணி, பூசணி, கேரட் போன்ற பச்சைக் காய்கறிகளை அதிகமாக உணவில் சேர்த்துக் கொள்ள அறிவுறுத்தப்பட்டது.
- காய்ச்சி ஆறிய வடிகட்டிய நீரையே பருக அறிவுறுத்தப்பட்டது. (தினமும் சுமார் 2 முதல் 3 லிட்டர் வரை)
- சிறுநீரகத் தொற்றுநோய்களுக்கு உடனே மருத்துவம் செய்ய அறிவுறுத்தப்பட்டது.
- சிறுநீரை அதிகநேரம் அடக்கி வைத்திருப்பதை தவிர்க்க வலியுறுத்தப்பட்டது.

❖ வாரம் இருமுறை திரிபலை தைலத்தை தலையில் தேய்த்துக் குளிக்க வலியுறுத்தப்பட்டது.

அஸ்மரிரோக பத்தியம்

கொள்ளு, பச்சைப்பயறு, கோதுமை, பழைய அரிசி, யவதானியம், சிறுகீரை, பூசனிப்பழம், இஞ்சி, யவட்சாரம் அவை அஸ்மரிரோக பத்தியங்கள். மற்றும் விரேசன சிகிச்சை, வமன சிகிச்சை, இலங்கணம், வியர்வை வாங்கல், சலாகைவிடல், பீச்சுதல், பற்று, ஒற்றடம் முதலியவைகளையும் சந்தர்ப்பத்திற்குத் தக்கப்படி செய்யலாம்.

அபத்தியங்கள்

மூத்திரம், சுக்கிலம் இவைகளின் வேகத்தைத் தடுத்தல், மலத்தை பந்திக்கும் படியான அன்னம், பழைய அன்னம், குளிர்ந்த அன்னம்.

OBSERVATION AND RESULTS

This study has been done to establish the role of Yaanai Nerunjil as a lithotriptic agent in Kalladaippu noi and assess that how far it can be helpful in the management of the disease.

Among the symptoms of Kalladaippu noi nausea, vomiting, burning micturition, dysuria, haematuria, back pain were reduced significantly within 15 days, other symptoms gradually subsided during the remaining course of treatment.

Treatment was given from 28 to 56 days. Gradation of results and the clinical assessments are tabulated.

Among 40 cases 29 cases (73%) showed good response in relief of symptoms and signs, 6 cases (15%) showed fair response and 5 cases (12%) showed poor response.

The age and sex incidence of these cases are shown in Table – 1.

S.No	Age in years	Sex		Total
		Male	Female	
1.	21-30	6	4	10
2.	31-40	7	6	13
3.	41-50	6	1	7
4.	51-60	3	1	4
5.	61-70	6	-	6
			Total	40

The drug efficacy on Renal calculus, ureteric calculus and vesical calculus are shown in Table - 2

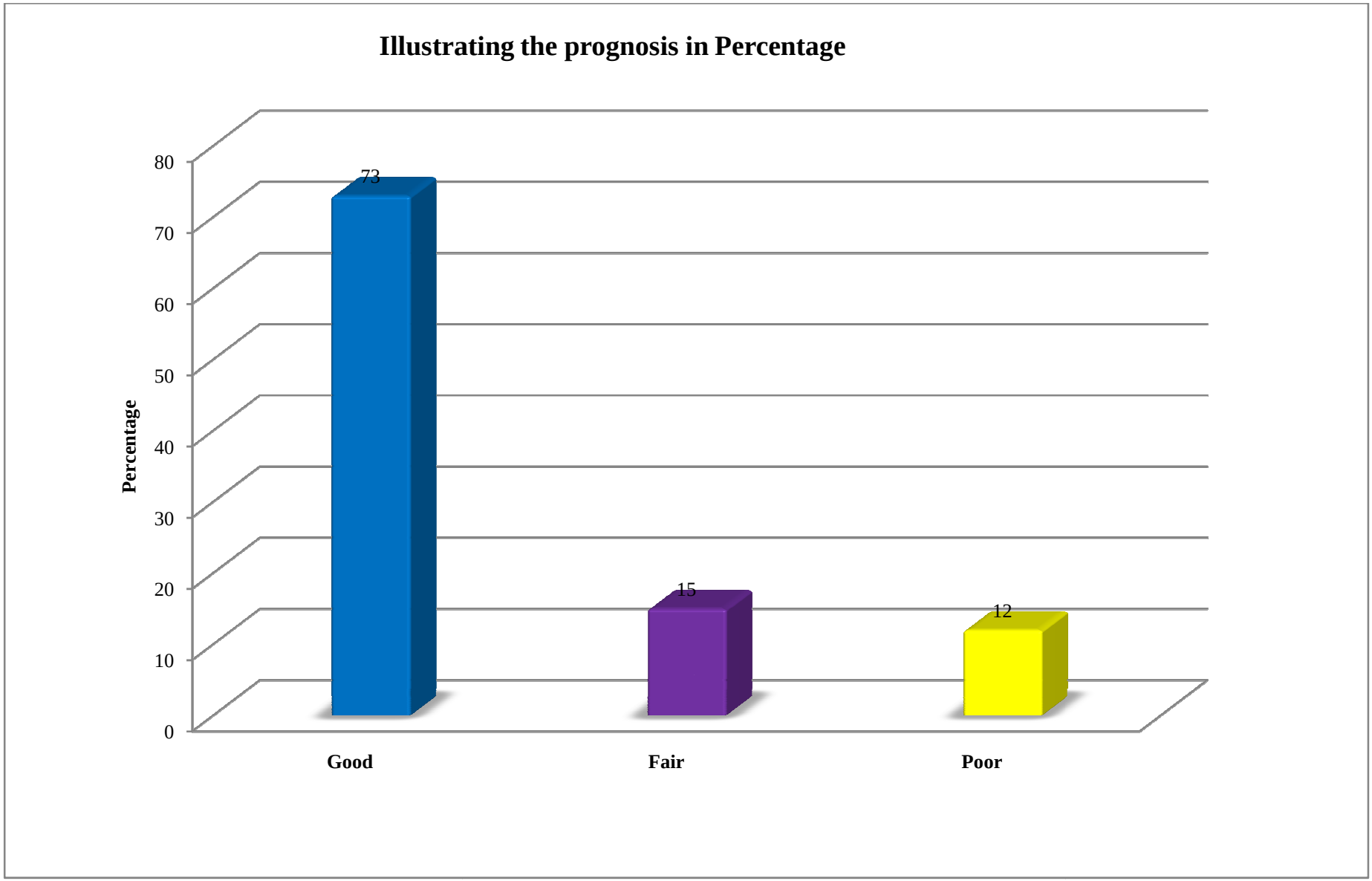
S.No	Site of the calculus	No.of Cases treated	No.of cases cured	Percentage of cured
1.	Renal calculus	32	27	84.3%`
2.	Ureteric Calculus	7	4	57%
3.	Vesical calculus	1	0	-

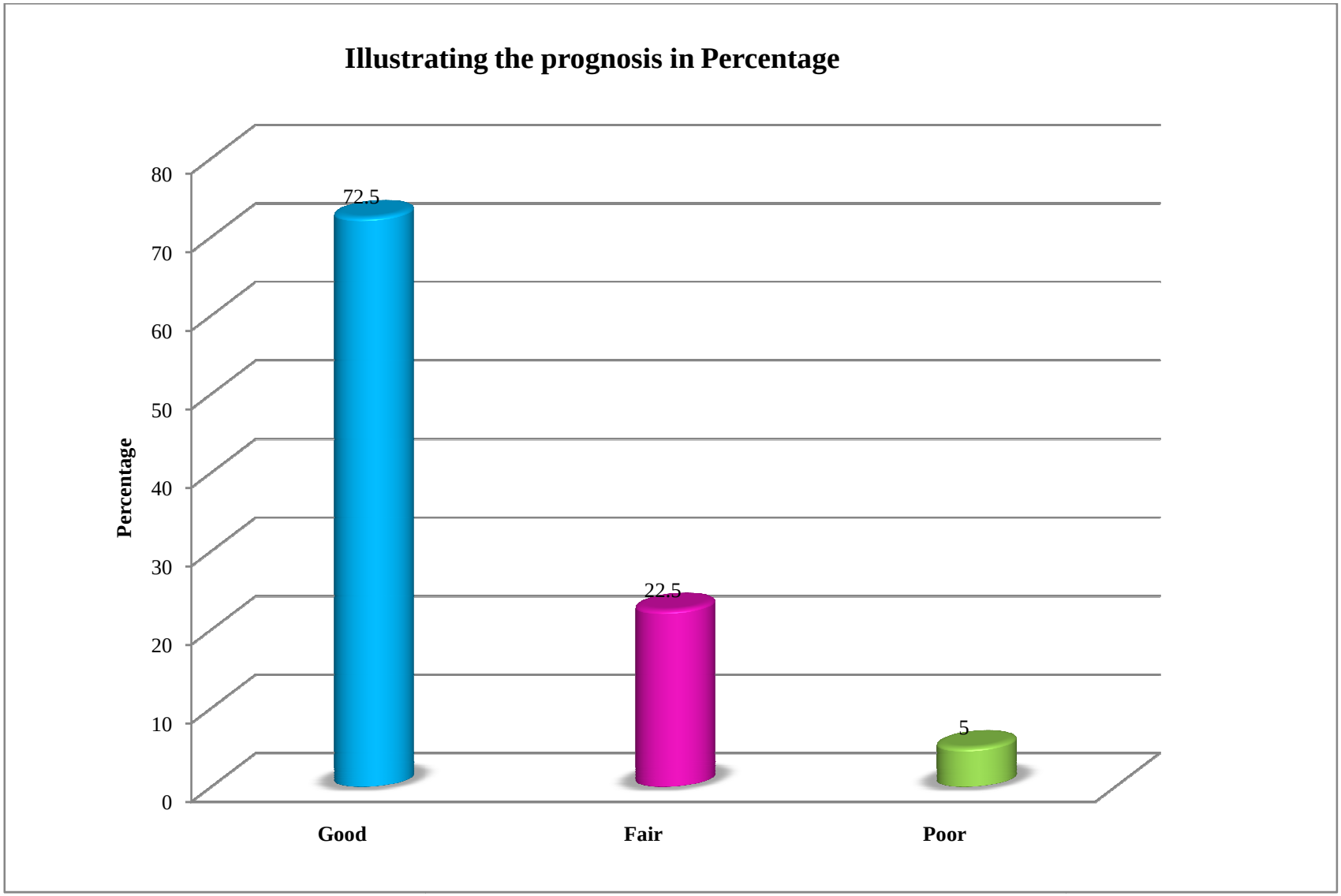
The drug efficacy, based on the size of calculus are shown in Table – 3.

S.No	Site of the calculus	No.of Cases treated	No.of cases cured	Percentage of cured
1.	5 mm and below	13	13	100%
2.	6 mm to 10mm	18	14	77.7%
3.	Above 10 mm	10	5	50%

Gradation of Results Table – 4

S.No	Results	No.of Cases	Percentage
1.	Good	29	73%
2.	Fair	6	15%
3.	Poor	5	12%


Illustrating the prognosis in Percentage
Percentage
80
70
60
50
40
30
20
10
0
73
15
12
Good
Fair
Poor


Illustrating the prognosis in Percentage
Percentage
80
70
60
50
40
30
20
10
0
72.5
22.5
5
Good
Fair
Poor

STATISTICAL ANALYSIS

Aim

The study subjects and the effectiveness of the drugs were analyzed as mean, Standard deviation and Percentages. The interpretations were made on the basis of student; test ‘t’ test. The S.P.S.S. package was used for the above analysis and interpretations.

Result and discussions

The study subjects were analysed based on their age and sex. Since the age and sex were independent variable.

Age and Sex

The study subjects selected from the study are 40 in number. Among them 28 are male and 12 are female. They were described by their age and sex as follows.

Sex and Age wise distribution of study subjects shown in Table – 1.

S.No	Sex	n	Age		‘t’	Significance	95% C.I of the population mean
			Mean	Std.deviation			
1.	Male	28	40.2	14.3	3.3	<0.001	-
2.	Female	12	47.2	10.3			
3.	Total	40	42.33	13.43	-	-	37.3 to 47.3 years

The above table shows the descriptive statistic of the study subjects in respect of age and sex. The mean age of the male is 40.2 ±14.3 years and the female is 47.2 ±10.3 years. The difference of age is statistically significatically since 't' value is 3.3 and <0.001. The mean age of the total study subjects 42.3±13.43 years and same of the population mean will be in between 37.3 to 47.3 years.

Effectiveness of the drug:

In this analysis also both kidneys of study subjects were taken in to account. If there is no calculus before treatment then the kidneys treated as normal and the size of the calculus present is treated as zero and it there was no calculus found after treatment is also taken as normal and the size of calculus is zero. The bellows mentioned analysis and interpretation clearly shows the effectiveness of the drug Yannai Nerunji chooranam.

Distribution of calculus before and after treatment of the study subjects in right and left kidneys shown in table - 2

S.No	Kidney	n	Calculus before treatment		Calculus after treatment		Mean deference	't'	Significance
			Mean	S.D	Mean	S.D			
1.	Right Kidny	30	3.32	3.54	1.10	2.59	2.21	5.1	P<0.000
2.	Left kidney	30	2.71	3.14	0.93	2.46	1.78	4.134	P<0.000

The analysis and interpretations presented in the above table clearly show that the effectiveness of the drug. The mean reduction in the right kidney is 2.21 + 2.3 mm of calculus. The reduction is highly statistically significant. Similarly the left kidneys mean reduction is 1.78 + 2.35 mm of calculus. This reduction is also highly statistically significant. The above reduction of calculus are attributed to the effectiveness of drug Yaanai Nerunjil chooranam. This interpretation is also supported by the response of the cases for administration and management of the kalladaippu discuses. Among the 40 cases, 29 are showing good response, 6 are showing fair response and 5 are showing poor response to the drug. The percentage of good response is 73% and the fair response is 15% the poor response is 12%.

DISCUSSION

According to the Siddha system of medicine, Kalladaippu noi is caused by the derangements of vatha and pitha humours, as said in the following poem.

"தெளிந்ததோர் கல்லடைப்பு உற்பத்தி கேளாய்

.....

வளிந்ததோர் வாத பித்தங் கோபித்தால்

வந்து பெருங்கல்லாய் நீர் வழியடைத்து

நலிந்ததோர் நாலுவிதக் கல்லடைப்பு

நண்பான வரலாறு நாட்டக் கேளே"

Thus the vitiated vatha and pitha humours reflect in the clinical symptoms like nausea, loin to groin pain, burning micturition and dysuria. The above signs and symptoms were relieved by the administration of the drug Yaanai Nerunjil chooranam.

"வாதம் மேலிட்டால் மதுரம் புளி உப்பு

....."

"பித்த மதிகரிப்பின் பேசும் பரிகாரம்

சுத்த துவரொடு சொல்லினிப்பு சத்தாகும்

....."

- ***நோய் நாடல் நோய் முதல் நாடல் பாகம் - ஐ***

As per the text it is understood that to neutralize the vitiated vatha and pitha humours, we have to give a drug which possess Inippu and Thuvarppu suvai.,

The Yaanai Nerunjil chooranam had Inippu and Thuvarppu suvai. Inippu suvai is made up of mann + neer and Thuvarppu suvai is made up of mann+vali according to Panjabootham theory. It possesses thatpa veeriyam. There fore the drug neutralizes the vitiated vatha and pitha humours.

The above Gunapadam explanation of the drug is supported by the pharmacological and clinical studies.

The Chemical analysis of the drug was done in the Bio-chemistry Laboratory of Govt. Siddha Medical College, Palayamkottai. The analysis report confirms that the drug contains trace amount of sulphate, ferrous iron, trace amount of phosphate and unsaturated compound.

SULPHATE:

Sulphate prevent the occurrence of any infection.

FERROUS IRON:

Ferrous iron is essential for the synthesis of haemoglobin. In the trial medicine iron is present in ferrous form which is soluble and readily absorbed in the intestinal lumen.

The Pharmacological analysis of the drug was done in the Department of Pharmacology, Govt. Siddha Medical College, Palayamkottai and C.L.Baid Metha College of Pharmacy, Chennai. The analysis establishes that the drug has got significant diuretic, antispasmodic and lithnotriptic actions.

The SEM analysis of the drug signifies good nano particle size that indicates absorption was very good and pharmaco therapeutic value was good.

The phytochemicals in the trial drug are glycosides, carbohydrates and terpenoids. The glycosides enhance the cardiac output to the kidney and enhances the diuresis. Terpenoids are anti-microbial, diuretic in action.

The trial drug was subjected to Physico-chemical and FTIR analysis and their results were observed.

In the clinical trial 40 out patients of both sexes and different age groups were selected. The author diagnosed the disease Kalladaippu according to the siddha aspect. Ultrasonogram of abdomen and pelvis was taken for all patients before and after treatment to confirm the diagnosis and improvement.

All the patients were given 1 gram of Yaanai Nemnjil Chooranam twice a day with water after food.

Out of 40 cases 29 cases (73%) showed good response, 6 cases (15%) showed fair response and 5 cases (12%) showed poor response.

There were no withdrawl symptoms and no adverse effects during the trial period.

SUMMARY

- The test drug Yaanai Nerunjil chooranam was selected for this study to establish the Lithotriptic, diuretic and antispasmodic actions in the management of Kalladaippu noi.
- From the review of Botanical aspect, the identification of the Yaanai Nerunjil chooranam was made possible.
- The review of Gunapadam aspect from the literature supports the therapeutic efficacy of the drug.
- The Biochemical analysis revealed that the Yaanai Nerunjil chooranam contains sulphate, ferrous iron, phosphate and unsaturated compounds.
- The pharmacological analysis revealed that the drug has got significant diuretic, antispasmodic and lithotriptic actions.
- From the clinical assessment, it is inferred that the drug had a goodresponse in 73% of cases, fair response in 15% of cases and poor response in 12% of cases.
- Therfore the test drug Yaanai Nerunjil chooranam is safe, simple, cost effective in the treatment of Kalladaippu noi.

CONCLUSION

It is concluded that the drug Yaanai Nerunjil chooranam has got significant effect in the treatment of Kalladaippu noi without producing any untoward effects.

INTRODUCTION

Siddha system of medicine is one among the ancient science which is profounded and practised by eminent spiritual scientists called siddhars. Siddhars are those who lived and maintained their bodies, as they desired best. They had investigated that the body though transient was the one and only instrument for attaining success in the spiritual development and growth and so worked out to attain the eight super natural towers, the Ashtamasidhi, essential for their goal.

Siddhars further realized that if the body could only be made strong and perfect they could get rid of birth and death and live for ages together.

In siddha system of medicine a close relation is maintained between human and prabancham (the universe) whatever changes occur in the prabancham, influences the human body also. It has been illustrated as,

[1] "அண்டத்தில் உள்ளதே பிண்டம்
பிண்டத்தில் உள்ளதே அண்டம்
அண்டமும் பிண்டமும் ஒன்றே
அறிந்து தான் பார்க்கும் போதே"

Our unique system of Tamil Medicine is based upon two main theories viz., the panchaboutha theory and Mukkuttram theory.

[1] சட்டமுனி ஞானம்

According to Panchabootha theory the universe is formed of five elements namely prithvi (Earth), Appu (Water), Theyu (Fire) Vaayu (Wind) and is formed of it in definite proportion. This is explained as

[2]"நிலம் நீர் தீவளி விசும் போடைந்தும்
கலந்த மயக்கம் உலகமாதலின்"

According to Mukkuttram theory, the three components namely vatham, pitham, and kabam, when in equilibrium keep the body in homeostasis but when vitiated either single or in combination bring about disease.

[3]"மிகினும் குறையினும் நோய் செய்யும் நூலோர்
வளி முதலா எண்ணிய மூன்று"

Today India is acknowledged as an economy as we have rich heritage of land, water, natural resources etc, but rampant anaemia has been reported among youngsters. Which is neither good for them nor for the economy.

- [4]India has highest number of cases of anaemia in world
- Over 90% Indian women adolescent girls and children are anaemia
- Anaemia adversely affects a child's mental and motor development
- A poor diet is the primary cause for anaemia

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[2] தொல்காப்பியம்

[3] திருக்குறள்

[4] Courtesy : THE HINDU

- So control of iron deficiency anaemia in young children and adolescent is necessary to improve the quality of life for youngsters.

AIM AND OBJECTIVE

The aim of this dissertation is to study the effect of mandooram (Ferroso Ferric Oxide) in the form of Chendooram for the treatment of paandu noi on the basis of haematinic action

In our siddha system metal and thathu therapy was introduced by our siddhars which is easy to preserve smaller in dosage and longer in self life.

PAANDU noi is an important hematological entity described in siddha literatures. It is essential to find out a simple drug to overcome paandu noi. The drug should be easily available, economic easily administrated and also effective in smaller doses. So the author has selected this drug for the dissertation purpose. The chendooram was prepared based on the reference in the Siddha Literature.

- ***Anuboha Vaithiya Deva Ragasiyam, Page No.381***

Paandu noi is a common disease of haematological entity, which has the following symptoms. Tiredness, loss of appetite, dyspnoea on exertion, and palpitation. In modern science these symptoms can be correlated with Iron Deficiency anemia.

In this dissertation the analysis of mandoora chendooram is done in all aspects like

- Chemical aspect

- Gunapadam aspect
- Siddha aspect
- Mordern aspect
- Bio-chemical analysis
- Pharmacological analysis
- Acute toxicity study
- Microbiological analysis and
- SEM analysis
- FTIR analysis
- ICP analysis
- Clinical studies

[5]GEOLOGICAL ASPECT OF MANDOORAM

Chemical name:

Ferroso Ferric Oxide (Fe_3O_4)

Vernacular names:

English	-	Iron rest
		Impure oxide of iron
		Magnetic iron oxide
		Magnetite
Tamil	-	Iromboo Chittam
Sanskrit	-	Mandooram
Hindi	-	Lohaka Zang
Malayalam	-	Irumbak Kitani
Bengali	-	Lokar-gu
Arabian	-	Khabsul Hadid
Persian	-	Zang-c-ahana
Duk	-	Lohaka-Gu

[6]CHEMICAL ASPECTS

(FERROSO FERRIC OXIDE - Fe_3O_4)

[5] Indian material medica – Volume II Page 62 By Dr. Nadkarni

[6] General Chemistry – 3rd edition By EBBING

The most important states of iron are +2 and +3, though a number of +4 and +6 states are known.

Iron (II) compounds are designated ferrous and contain the pale green Fe^{2+} ion or complex ions. Iron (III) compounds are called ferric and contain the Fe^{3+} ion (Which is yellow to orange to brown, deending on the extent of hydrolysis) or complex ions.

Three oxygen compounds of iron are known: Iron (II) oxide, or ferrous oxide, Fe0; iron (III) oxide, or ferric oxide, Fe_2O_3; and ferrosoferric oxide, or ferroferric oxide, Fe_3O_4, which contains iron in both oxidation states.

Ferrous oxide is a greenish to black powder used primarily as a pigment for glasses. It occurs in nature as the mineral wuestite and it can be prepared by heating an iron (II) compound in the absence of air or by passing hydrogen over ferrite oxide. Ferric oxide is a reddish-brown to black powder that occurs naturally as the mineral hematite. It can be produced synthetically by igniting virtually any ferrous compound in air.

Ferric oxide is the basis of a series of pigments ranging from yellow to a red known as Venetian red. The finely powered red form, often called jewellers rouge, is used for polishing precious metals and diamonds, as well

as in cosmetics. Ferric oxide forms a number of hydrates with variable structures and compositions.

A common form is iron rust, produced by the combined action of moisture, carbon dioxide, and oxygen in the air on metallic irion. Ferrosoferric oxide occurs as the mineral magnetite in the form of magnetic, black or red – black crystals. It is prepared by passing steam over red-hot iron.

The oxide is widely employed in ferrites, substances with high magnetic permeability and high electrical resistively used in certain computer memories and coatings for magnetic tape. It is also used in certain computer memories and coatings for magnetic tape. It is also used as a pigment and a polishing agent.

Atomic number	26
Atomic weight	55.847
Melting point	1,538^{o}C (2,800^{o}F)
Boiling point	3,000^{o}C (5,432^{o}F)
Specific gravity	7.86(20^{o}C)
Valence	2,3,4,6
Electronic config.	2-8-14-2 or (Ar)3d^{6}4s^{2}

Oxide film theory:

Faraday suggested that the passivity of iron is due to the formation of an extra thin and seperisous film on the surface of iron. The film is usually of ferroso ferric oxide Fe_3O_4. This theory is confirmed by the fact that if the oxide film on the surface is removed by scratching or by heating it in a reducing atmosphere of H_2 (or) CO (or) by dissolving it in Iodine solution, Iron again becomes active and begins to give the usual reaction.

Rusting (or) Corrosion of Iron:

When a piece of iron is left exposed to ordinary moist air it is found covered with a Reddish brown coating which can easily be detached and is called rust. The process of formation of rust is called rusting.

Partington suggest that rust is chiefly hydrated ferric oxide $2Fe_2O_3$ $3H_2O$.

Analysis shown that it is probably a mixture of ferric oxides and basic ferrous and ferric carbonates.

If rust is kept long exposed to air the amount of ferrous compounds becomes very small and ultimately hydrated ferric oxide predominate.

Ferrous Oxide – Feo:

It is obtainted as black pyropho powder when ferrous oxalate is heated to about 430k in the absence of air.

$(COO)_2$ Fe $\longrightarrow$ Feo + Co+ Co_2

In air it burns to give ferric oxide. It is insoluble in water but soluble in non oxidizing acids (HCL,dil.H_2SO_4) give ferrous salts.

4 Feo + O_2 $\longrightarrow$ $Feso_4$ + H_2O

Ferric Oxide Fe_2O_3

Large quantities of ferric oxide occur native as haematite and limonite. It is also abtained when ferric carbonate, nitrate, (or) oxalate is heated or when iron pyrites are roasted in air.

$4Feso_4 + 11O_2 \longrightarrow 2Fe_2O_3 + 8So_4$

Ferric oxide is obtained by heating ferrous sulphate is bright red in colour and is used as a pigment under the name Venetian red.

$2Feso_4 \longrightarrow Fe_2O_3 + So_2 + So_3$

It is amphoteric in characters and reach with acids and alkali.

$Fe_2O_3 + 6HCL \longrightarrow 3Fecl_3 + 3H_2O$

$FeO_3 + Na_2\ Co_3 \longrightarrow Na\ Fe_2O_4 + Co_2$

It is used as

(1) A red Paint

(2) A Polishing powder by jewellers

(3) A catalyst in the manufacture

of sulphuric acid by Mannheim Process.

BOTANICAL ASPECT

Wedelia chinensis, Less.

[7]Classification

Taxonomy position according to BENTHAM – HOOKER

Class	:	Dicotyledons
Subclass	:	Gamopetalae
Series	:	Inferae
Order	:	Asterales
Family	:	Asteraceae
Genus	:	Wedelia
Species	:	chinesis

Synonyms

[8]Wedelia calendulacea, Less.

[9]Solidago chinensis, Osbeck.

Distribution

[10]Throughout India, in wet places and coastal areas. [11]The plant is distributed in Tamil Nadu, Assam, West Bengal, Bangladesh, Arunachal,

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[7] Taxonomy of angiosperms.

[8] The wealth of India, page no 568.

[9] Medicinal plants in India, Vol II p.no 537

Uttar Pradesh, Srilanka, Japan, China, Indomalaysia. [12]In Tamil Nadu, it is distributed in Coimbatore, Kanniyakumari, Madurai, North Arcot, Salem, Tiruchirappalli, Tirunelveli.

Habit

[13]Creeping herb.

Stem

[14]The stems are 15 to 45 cm tall, rooting at the lower nodes, hairy.

Leaves

[15]The leaves are simple, opposite, sub-sessile, Lanceolate-oblong, entire or irregularly crenate. [16]Hair on both surfaces of leaves are scattered, oppressed, rigid and white;

[17]Dark green, odoureless and tasteless.

Inflorescence

[18]Head inflorescence

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[10] Indian medicinal plants part V, p.no.404

[11] Medicinal plants of India Vol II, p.no. 519
[12] Medicinal herbal & flowers,p.no.265
[13]Flowering plants of Travancore, p.no.225
[14] Medicinal herbal & flowers, p.no. 265
[15] Medicinal plants of India Vol II, p.no. 519
[16] Medicinal herbal & flowers, p.no. 265
[17] Quality standards of India, p.no.226
[18] Medicinal plants in India, Vol II p.no 537

Flowers

Bright yellow in terminal heterogenous heads. [19]Flower heads are 3 cm in diameter and peduncles are 2.5 to 15 cm long.

Fruit

[20]Truncate, compressed or tubercles Achenes without pappus or with a ring of round scala.

Flowering and fruiting

[21]June – December

Part Used

[22]Whole plant.

[23]Microscopic Description

Stem

TS of stem almost circular in outline, cuticle thin, trichomes 2 to 3celled, some epidermal cells filled with yellowish content, followed by 3-5 layers of collenchymatous hypodermis. Cortex made up of aerenchyma with large intercellular spaces. Endodermis and pericycle distinct, later in the

[19] Medicinal herbal & flowers, p.no. 265
[20] Indian medicinal plants part V, p.no.404
[21] Medicinal plants in India, Vol II p.no 537
[22] Indian medicinal plants part V, p.no.404
[23] Quality standards of India, p.no.227

form of sclerenchymatous cap over the primary vascular bundles. Cambium distinct. Phloem made of usual elements; xylem in the form of continuous ring. Pith cholenchymatous.

Leaf

TS of leaf dorsiventral, shows prominent cuticle,thin walled epidermis on both the surfaces, single layer palisade cells, well developed spongy parenchyma, vascular bundle amphicribal surrounded by thick-walled bundle sheath. Leaf amphistomatic. In surface view, epidermal cells are slightly wavy to angular, stomata anisocytic, two types of trichomes seen on upper surface, long unicellular and small multicellular.

Powder

Green, Odour and taste not characteristic; anisocytic stomata, prismatic crystals, parenchymatous cells with rosette crystals, vessel elements and trichomes.

[24]Substitutes / Adulterants

Chemically as well as pharmacologically, Eclipta alba resembles Wedelia chinesis, Less and often substituted for each other UV absorption

[24] Indian herbal pharmacopoeia vol I.

and TLC patterns of the plant extracts exhibit striking dissimilarities between the two drugs which can be used as pharmacognostic tools.

Medicinal Uses and Properties:

- [25]The plant is astringent, bitter, acrid, thermogenic, anti-inflammatory, vulnerary, ophthalmic, cardiotonics, anthelmintic, diuretic, aphrodisiac, sudorific, febrifuge, trichogenous.
- The plant is useful in vitiated conditions of kabha and inflammation, elephantiasis, otalgia, cephalgia, wounds, **ulcers,** nyctalopia, dysopia, hepatospleenomegaly, colic, **dyspepsia, helminthiasis,** strangury, anaemia, seminal weakness, fever, baldness, greyness of hair.
- [26]The plant is useful in **indigestion** and root used in abscess.
- [27]The plant is very specific for viral hepatitis.
- [28]Decoction of herb used in menorrhagia and uterine haemorrhages.
- Ethanolic extract of herb inhibits the growth of Ehrlic ascitis carcinoma.

[25] Indian medicinal plants part V, p.no.404
[26] Flowering plants of Travancore, p.no.225
[27] Indian medicinal plants part V, p.no.404
[28] The useful plants of India, p.no.688

- [29]The leaves are regarded as tonic, alterative, useful in cough, cephalgia, diseases of the skin and also it is used in dyeing grey hair and to promote its growth.
- [30]Juice of leaves used in tattooing the body.

- Root pounded and used as a black dye with salts of iron.
- [31]Leaves contains large amount of phenolic constituents and it is also effective in the treatment of **inflammatory conditions.**
- Leaves used in treatment of **digestive system disorder.**
- Eclipta and wedelia which are effective as **gastro intestinal mucosal protective agents.**
- The extract contained an agent with neuropharmacological activity that may be **sedative** in nature.
- The plant is traditionally used to reduce mental tension and to induce sleep and scientifically reported to posses antioxidant property which indicates its usefulness in **reducing anxiety and stress in emotional condition.**

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[29] Medicinal plants in India, p.no.537
[30] Flowering plants of Travancore, p.no.225

[31] www.pharmaonline.com

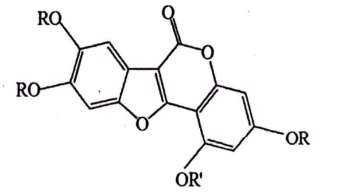
PHYTO CHEMICAL ASPECT

[32]Major

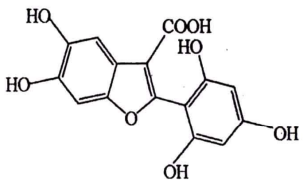
Coumestan (mixture of wedelolactone and demethyl wedelolactone)

Others

Nor- wedelic acid, norwedelolactone, tri-o-methylwedelolactone and β amyrin.



Wedelolactone R' = CH_3, R=H
Norwedelolactone R' = R = H
Tri-*O*-methylwedelolactone R' = R= CH_3



Norwedelic acid

[33]New compounds

- ❖ 6-0-isobutyrate
- ❖ 6-0-angelate
- ❖ 6-0-methacrylate of oxidoisotrilobolide
- ❖ 6-0-isobutyrate
- ❖ 6-0-angelate
- ❖ 16-0-methacrylate of trilobolide
- ❖ diterpene- wedelia-seco-kaurenohde

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[32] Quality standards of India, p.no.226
[33] Medicinal plants in India, p.no.590

- ❖ 3α –an-geloyloxy
- ❖ 3α –tigloyloxy and
- ❖ 3α- cinnamoyloxy derivative of ent-kaurenoic acid
- ❖ Methyl 3α – angeloyloxy-9 β- hydroxy-ent-kaurenoate
- ❖ Methyl 3α- cinnamoyloxy-9β-hydroxy-ent-kaurenoate isolated from aerial parts; germacrene, α—humulene, caryophyllene, squalene, phellandrene, p-cymene, sitosterol and ent- kaurenic acid also isolated.

- ➢ The plant contains glycosides, saponins, phytosterols, reducing sugars, tannins.
- ➢ Juice yields oil soluble black dye, tannin.
- ➢ Leaves contain benzoforan, norwedelic acid, norwedelolactone, triterpenoids, saponin, chikusettin, isoflavanoids and wedelolactone.
- ➢ [34]The expressed juice of the herb contained

An oil soluble black dye	11.2
Tannin	220
Carotene	1.14
Saponin (contradictory report)	3.75

[34] The wealth of India, vol II, p.no.568

Phytosterol	3.75
Waxy compound	29.7
Resin	44
Chloroform extract (resinous mass)	27
Gum	80
Total sugar	1040g/100g juice

- An Indian analysis of the herb gave negative test for alkaloid, but the Chinese investigations showed the presence of an alkaloid in the stems, leaves and flowers.

GUNAPADAM ASPECT

மண்டூரம்

இது அயத்தை காட்டிலும் நிறைந்த வன்மையுடையது. இந்த ஆய்வு கட்டுரையில் மண்டூர செந்தூரமானது பாண்டு நோய்க்காக "அனுபோக வைத்திய தேவ ரகசியம்" என்ற நூலினை ஆதரமாக கொண்டு எடுக்கப்பட்டதாகும்.

வேறு பெயர்கள்:

- [35]கிட்டம்
- சிட்டம்
- அயோமலம்
- அயக்கிட்டம்
- லோக மண்டூரம்
- [36]கிச்சு சிட்டம்
- இரும்பு சிட்டம்
- இரும்பு துரு
- இரும்ப கதலி
- இரும்பு துகர்
- பழஞ் செங்கற் கிட்டம்

[35] குணபாடம் தாது வகுப்பு – By Dr.R Thiyarajan
[36] தழிழ் ஆங்கில அகராதி

ORGANOLEPTIC CHARACTER

Taste (சுவை) – astringent

Potence (வீரியம்) – Hot potence

Action

Stomachic - பசியுண்டாக்கி

Nutrient - உடல் உரமாக்கி

Alterative - உடல் தேற்றி

பொது குணம்:

[37]"சிட்டமொன்றாற் சோபை கிளை வீக்க மத்தி சுரந்
துட்டவிட பாகந் சுவாசமையங் - கெட்ட கொடும்
பாண்டிருமல் நீராமை பாழும் பிரமிய முன்
தாண்டி விடு முண்டி ரத்த தாது"

[38]பிறப்பு:

கொல்லன் உலையில் இரும்பினால் விடப்பட்டு அக்கினியில் வெந்து, மெழுகின் பதத்தல் கட்டியாகின்றது.

[39]It is prepared from iron rest consisting of small particles of iron (or) forge scales. Scattered round the black smith' s anvil, when hot iron is

[37] குணபாடம் தாது சீவ வகுப்பு பக்க எண் 145 – By Dr.R.Thiyarajan
[38] குணபாடம் தாது சீவ வகுப்பு பக்க எண் 145 – By Dr.R. Thiyarajan
[39] Indian material medica Volume X Page no 62 – By Dr Nadkarni

beaten on it. These by exposure to air become rusty brittle. Then they are considered fit for use.

[40]மண்டூர செந்தூரத்தின் சிறப்பு

"போட்டிடுவாய் மண்டூரம் செந்தூரமாச்சே
போக்கிலே வியாதிகளைப் பிடுங்கித் தின்னும்
மாட்டிடுமே மகோதரங் காமாலை பாண்டு
ஆக்கை வலி இவையெல்லாம் தீரும்"

மண்டூரத்தின் சுத்தி முறைகள்:

1. ஆயிரம் வருடம் சென்ற இரும்பு கிட்டத்தை (மண்டூரத்தை) நெருப்பிலிட்டு காய்ச்சிப் பசுவின் நீரிலே 10 முறை தோய்க்க சுத்தியாகும். ஒவ்வொரு முறையும் புதிதான பசுவின் நீரினை உபயோகிக்கவும்.
2. அயக்கிட்டத்தை உரலிலிட்டு இடித்து வஸ்திரகாயம் செய்து ஒரு பீங்கான் பாத்திரத்தில் இட்டு, அதன் மேல் நாலு அங்குலம் நிற்கும் படியாகக் காரணமாக சீமை திராட்சைக் காடியை விட்டு இரண்டு வாரம் ஊற வைத்து, வெள்ளை பூண்டை இடித்து பிழிந்த சாற்றை முன்போல விட்டு ஒரு வாரம் ஊற வைக்க வேண்டும். ஊற வைத்த சாற்றை இடை இடையே ஊற்றி விட்டு, அச்சாற்றையே புதிதாய் விட வேண்டும்.இவ்விதம் முறையே முன்சாறுகளால் செய்த பின்பு

[40] அகத்தியர் வைத்திய காவியம் 1500 பக்கம் எண் 90

வாதுமை நெய்யில் அல்லது பசுவின் நெய்யில் சிட்டத்தை நன்றாய் வறுத்து பொடித்துக் கொள்வதே கிட்டத்தின் சுத்தி

3. கிட்டத்தை கல்லுரலிலிட்டு இடித்து வாயகன்ற ஒரு சட்டியிலிட்டு அதன்மேல் நாலு பங்கு எடை புளியிலையைப் போட்டு எண் மடங்கு நீர் விட்டு, ஒரு சாமம் (3 மணி) வேகவைத்து, ஆறிய பின் இலையையும், பொடியையும், சேர்த்து நன்றாய்த் தேய்த்துக் கழுவி உலர்த்தி, முறத்திலிட்டு புடைத்து, இலையை நீக்கிவிடுக. பிறகு கிட்ட பொடியை அம்மியிலிட்டுப் பொடித்து, ஒரு சட்டியில் இட்டு, எட்டு பங்கு கோமூத்திரத்தை விட்டு, அடுப்பேற்றிச் சிறு தீயால் எரித்து, மூத்திரம் சுண்டியபின் இறக்கி, நீர் விட்டு கழுவி எடுத்து கொள்ளச் சுத்தியாம்.

மண்டூரம் சேரும் பாண்டு நோய்க்கான மருந்துகள்

1. **மண்டூர கியாழம்:**

அயக்கிட்டம், மஞ்சள்கரிசாலை, கடுக்காய், மிளகு

சமயெடையாகக் கியாழம் செய்து சாப்பிட பாண்டு தீரும்.

- உயிர்காக்கும் சித்த மருத்துவம் (பக்.601)

2. **பாண்டு கியாழம்:**

அளவு: 300 மி.லி 2 வேளை 3 நாள்

- உயிர்காக்கும் சித்த மருத்துவம் (பக். 523)

3. **புனர்வாதி கியாழம்:**

அளவு : 30 மி.லி, 2 வேளை

- அனுபவ வைத்திய தேவராகசியம் (பக். 369)

4. மண்டூர செந்தூரம்:

அளவு : 488 மி.கி, 2 வேளை

அனுபானம் : கரிப்பான் சாறு

- உயிர்காக்கும் சித்தமருத்துவம் (பக்.488)

5. கந்தக ரச வடகம்:

அளவு : 1 கிராம், 2 வேளை

அனுபானம் : எருமை மோர்

- உயிர்காக்கும் சித்த மருத்துவம் (பக்.474)

6. சுயலோகாக்கினி:

அளவு : 130 மி.கி, 2 வேளை 3 to 5 நாள் கொடுக்கவும்

அனுபானம் : பனைவெல்லம்

- கண்ணுச்சாமி பரம்பரை வைத்தியம் (பக். 451)

7. நாராயண மண்டூர செந்தூரம்:

அளவு : 488 மி.கி, 2 வேளை

அனுபானம் : தேன்

- *பிராணரட்சாமிர்தசிந்து (பக்.192)*

8. மண்டூர செந்தூரம்:

அளவு : 980 மி.கி, 2 வேளை

அனுபானம் : தேன்

- பிராணரட்சாமிர்த சிந்து (பக்.195)

9. இராஜ மண்டூர செந்தூரம்:

அளவு : 488 மி.கி, 2 வேளை

அனுபானம் : தேன்

- பிராணரட்சாமிர்தசிந்து (பக்.387)

10. மண்டூர பற்பம்:

அளவு : 488 மி.கி, 2 வேளை

அனுபானம் : தேன்

- பிராணரட்சாமிர்த சிந்து (பக்.44)

11. காந்த வல்லப ரசம்:

அளவு : 130 மி.கி, 2 வேளை

அனுபானம் : தேன்

அனுபவ வைத்திய தேவ ரகசியம் (பக்.357)

12. புனர்னவாதி வடகம்:

அளவு : 1 வழ 2 மாத்திரை, 2 வேளை

அனுபானம் : மோர்

அனுபவ வைத்திய தேவரகசியம் (பக். 374)

13. மண்டூர லவணம்:

இரும்பு சிட்டத்தை சிவப்பாகக் காய்ச்சி கோமூத்திரத்தில் தோய்க்கவும் இந்தப் பிரகாரம் பல தடவை செய்து பிறகு அந்த சிட்டத்திற்கு சமஎடை இந்துப்பு சேர்த்து கோமூத்திரத்திலிட்டு அடுப்பேற்றி தான்றிக்காய் விறகுகளினால் புகையாமல் எரித்தால் "பிலீதலவணம்" அல்லது "மண்டூர லவணம்" என்று பெயர்.

அளவு : 5 கிராம், 2 வேளை

அனுபானம் : மோர் (ழச) தேன்

தீரும்நோய்கள் : இதைவிட பாண்டுரோகத்தை நாசப்படுத்தும் படியான மருந்து வேறொன்றும் உலகில் கிடையாதென்று கூறப்படுகின்றது.

- அனுபவ வைத்திய தேவரகசியம் (பக்:372)

14. கண மண்டூர செந்தூரம்:

அளவு : 65 மி.கி, 2 வேளை

அனுபானம் : தேன்

- அனுபோக வைத்திய பிரம்ம ரகசியம் (பக்.35)

16.மண்டூர பற்பம்:

அளவு : 1 முதல் 2 குன்றி எடை, 2 வேளை

அனுபானம் : சுக்கை மோர் விட்டு அரைத்த கற்கம்

- அனுபோக வைத்திய நவநீதம் பாகம் -I (பக்.42)

17.மண்டூரச் சூரணம்:

அளவு : 1 முதல் 2 வராகனெடை, 2 வேளை, ½ முதல் 1 மண்டலம்

அனுபானம் : நெய், தேன்.

அனுபோக வைத்திய நவநீதம் பாகம் -I (பக்.45)

18. லோக மண்டூர மாத்திரை:

அளவு : 1 மாத்திரை, 10 வேளை (5 நாள்)

அனுபானம் : வெந்நீர்

19.அனுபோக வைத்திய நவநீதம் பாகம் -I (பக்.47)

20.லோக மண்டூர இளகம்:

அளவு : 1 ½ முதல் 2 ½ வராகனெடை , 2 வேளை, ½ முதல் 1 மண்டலம்

பத்தியம் : இச்சாபத்தியம்

அனுபோக வைத்திய நவநீதம் பாகம் -I (பக்.48)

20. லோக மண்டூர வட்டு:

அளவு : 3 முதல் 4 குன்றி, 2 வேளை, ½ முதல் 1

மண்டலம்

அனுபானம் : நெய், தேன், சர்க்கரை, தயிர்

- *அனுபோக வைத்திய நவநீதம் பாகம் -I (பக்.41)*

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21.திரிபுரத்தாண்டவ செந்தூரம்:

அளவு : பணவெடை, 2 வேளை

அனுபானம் : திரிகடுகு பொடி, தேன்

- *அகத்தியர் வைத்திய காவியம் 1500 (பக்.700)*

மண்டூரம் சேரும் பிற நோய்க்கான மருந்துகள்

1. கனமண்டூர செந்தூரம்:

அளவு : 65 மி.கி, 2 வேளை

அனுபானம் : தேன்

தீரும்நோய்கள் : சுவாச காசம், உப்புசம், சயம், கிராணி, அதிசாரம், உட்காய்ச்சல், சோகை, வீக்கம்

- *கோசாயி I-ம் பாகம் (பக்.35)*

2. மஞ்சள் காமாலைக்கு மருந்து:

அளவு : 4 கிராம், 2 வேளை, 7 நாட்கள்

பிரமமுனி வைத்திய சூத்திரம் II-ம் (பக்:42)

3. குளிர்சுரக் கியாழம்:

அளவு : 30 முதல் 60 மி.லி, 2 வேளை

4. உதிரக்கட்டு நஞ்சுக் குடிநீர்:

அளவு : 30 முதல் 60 மி.லி, 2 வேளை

அனுபானம் : தேன்

தீரும் நோய்கள் : சூதகச்சூலை, சூதகபந்தம்

- அகத்தியர் பள்ளு 200 (பக். 691)

5. சண்டமாருதச் செந்தூரம்:

அளவு : 488 மி.கி, 2 வேளை

அனுபானம் : தேன்

தீரும் நோய்கள் : காமாலை, சோகை, சுரங்கள்

- அகத்தியர் வைத்திய காவியம் 1500 (பக.691)

6. மகாமேக ரசம்:

அளவு : 130 மி.கி, 2 வேளை

அனுபானம் : தேன், நெய், வெண்ணெய்

தீரும் நோய்கள் : கபநோய்கள்

- அகத்தியர் வைத்திய காவியம் 1500

7. அமிர்த சஞ்சீவிகுளிகை:

அளவு : 130 மி.கி, 2 வேளை

அனுபானம் : பால்

தீரும்நோய்கள் : சன்னி, முத்தோடங்கள்

- அகத்தியர் வைத்தியகாவியம் 1500 (பக்.786)

8. உலோகமண்டூர செந்தூரம்:

அளவு : 30 மி.கி, 2 வேளை

அனுபானம் : தேன்

தீரும் நோய்கள் : முப்பிணி முதலான அசீரணமந்தம், சுரம்

குணபாடம் - தாது சீவ வகுப்பு (பக்198)

9. கருங்குழம்பு:

அளவு : 244 மி.கி, 2 வேளை

அனுபானம் : பனைவெல்லம்

தீரும்நோய்கள் : மகோதரம், காமாலை, வாதநோய்கள்

GUNAPADAM ASPECT

மஞ்சள் கரிசாலை – **Wedelia chinensis, Less**

VERNACULAR NAMES:

[41]Hindi	:	Pilambhamgara
Kan	:	Kalsarji, Gargari
Mat	:	Mannakannunni
San	:	Pitabhrngarajah, Pitabhringa
Tam	:	Manjal karilamkanni, Patalai kayyanthakarai
Tel	:	Guntagalagara
[42]Guj	:	Bhangaru
Ben	:	Bhimara, kesraj

வேறுபெயர்கள்:

[43]“பொற்றலை வல்லி புகழ்செங் கொடிச்சிதான்
நற்றலைப் பொன்னி நலங்கிய பொற்பூவி
சிற்றலை தேவி சிவந்த கரிசாலை
கற்றலை பொற்றலை கையாந்த கரையே.”

[44]”பொற்றாலைக் கையாந்தகரைப் புகலக்கேளு

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[41] Indian medicinal plants part V p.no. 404
[42] The wealth of India, vol II, p.no.568
[43]சட்டைமுனி நிகண்டு 1200, ப.எண்.160
[44] போகர் நிகண்டு 1200 ப.எண்.254,317

பொற்பூவிச் செந்தூரத் தாதியானாள்

"சிற்றலை வல்லியாஞ் செங் கொடிச்சிதானுஞ்

சேர்ந்து நின்றவாசினியாம் பொன்னிச்சியாகும்

நற்தலைத் தேவியாஞ் சிவந்தகரிசாலை

நாறுகின்ற தேகத்தி களாபத்தியாகுங்

கற்தலைச் செப்பிச்சி காயசித்தி

கனமான பொற்றலையின் காட்சியாமே."

பொருள்:

பொற்பூவி செந்தூரந் தூதியானாள், சிற்றலை வல்லி, செங்கொடிச்சி, வாசினி, பொன்னிச்சி, தேவி, சிவந்த கரிசாலை, நாறுகின்ற தேகத்தி, கலாபத்தி, செப்பிச்சி காயசிற்றி.

[45]"நன்றான, வசலோமிய அமீத மென்றும்

நளினி மென்ற, வக்க தாரி மூலி யென்றும் பேரு

அன்றான வனோத வாடமூலி என்றும் பேரு

அங்கையா, அஞ்சப் பூடென்று மதற்குப் பேரு

வன்றான, வாழ் செடிப் பூண்டென்றும் பேரு

மதுர காடகமூலி என்பதற்குப் பேரு

குன்றான நுவழலோசை ப்பூடென்றும் பேரு

கூறினோ மாகாத்தெளிவு, பொற்றலைக்கையான் பேரே'."

[45] பஞ்ச காவிய நிகண்டு, ப.எண்.188,189

பொருள்:

வசலோமிய அமீதம், வக்கதாரி மூலி, வனோத வாடமூலி, அஞ்சப்பூடு, வாழ்செடிப் பூண்டு, மதுர காடக மூலி, நுவழலோசைப் பூடு என்பன.

Useful Parts:- Whole Plant

ORGANOLEPTIC CHARACTER:

- Taste – Bitter
- Potence – Hot Potence
- Biotransformation – Pungent

ACTION:

- Cholagogue
- Tonic
- Alterative
- Emetic
- Purgative
- Deobstruent
- Hepato tonic

[46]வெளுப்பு நோய்

வேறுபெயர் : வெண்மை, நோய், பாண்டு

இயல்பு : இயற்கை நிறமாறி, உடல் வெளுத்து, கண்ணையும் நகக் கண்ணையும், நீக்கிப் பார்க்கின் குருதியின்றி வெளுத்திருக்கும்.

நோய் தோன்றும் வழி:

குருதியின் வன்மையைக் குறைக்கக் கூடிய உப்பு, புளிப்புள்ள பொருள்களை மிகுதியாகக் கொள்வதாலும்.

சுரம், பேதி, வாந்தி, கீல்வாயு முதலிய நோய்களுக்குட்படுதாலும் குருதியை அளவு கடந்து வெளியாக்கும் பெரும்பாடு, குருதியழல் நோய், குருதிக்கழிச்சல், முளைநோய் (மூலம்) குருதி வெளிப்படுத்தலாலும், வெட்டுப் பட்டு மிகுதியாகக் குருதி வெளிப்படுதலாலும் இந்நோய் உண்டாகும்.

அன்றியும் நச்சுத்தன்மையுடைய மருந்துகளை நாளளவுக்கு மிஞ்சி உண்பதாலும், உடலை இளைக்கச் செய்யும் வயிற்றுப்புழு, இளைப்பு, நோய், நணக் கழிச்சல் முதலியவைகளாலும்.

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[46] குணபாடம் முதல் பாகம் ப.எண் 229

குருதிப் பெருக்கைக் கெடுக்கக்கூடிய ஈரல் நோய்களாலும் புகையிலை, வெற்றிலைப்பாக்கு, மண், சாம்பல், திருநீறு, கற்பூரம் முதலியவைகளை அடிக்கடி கொள்வதாலும் இந்நோய் வரும்.

முற்குறிகள்:

உணவு முதலிய வேறுபாடுகளால், தீக்குற்ற மிகுந்து குருதியின் நிறத்தையும் எடையையும் கெடுத்து, உடற்கு வேண்டிய ஊட்டத்தையும் கொடாமல், உடலை வெளுக்கச் செய்யும்.

பின்பு சிறிது தொலைவு நடக்கினும் கால் ஓய்ந்து போதல், பெருமூச்சு வாங்கல், உணவில் விரும்பமின்மை, வாய்க் குமட்டல், தலைசுற்றல்,கண் இருளல், அடிக்கடி மயக்கமாதல், மார்பு துடித்தல், உடல்,இளைத்தல் ஆகிய குறிகளையும் காட்டும்.

பொதுக்குறி குணங்கள்:

இந்நோயில் உடல் வன்மை, நாளுக்கு நாள் குறைந்து நடக்க இயலாமை, தலைநோதல், மார்பு துடித்தல், கண் அடிக்கடி இருளல், தலைசுற்றல், மயக்கமுண்டாதல், மூச்சுத்தடுமாறல் பசித்தீக் கெடல், உணவு வேண்டாமை, உண்டசிறு உணவும் வாந்தியாதல் ஆகிய குறிகள் தோன்றும்.

இன்னும் மிகவும், வெளுத்துத் தோல்சுருங்கல், உடல் மெலிந்து பளபளத்து வெளுப்பாதல், நகக் கண்கள் தடித்து வெளுத்தல், நாவெடித்துப் புண்ணாதல் அல்லது நாவின் மேல் தோலைச் சீவியெடுத்து போன்று

சிவந்து காணுதல், அல்லது நாக்குப் பட்டுத்துணிபோல் வழுவழுத்து வெளுத்துக் காணல், தொண்டை கட்டல், என்னுங் குறிகளும் காணும்

இந்நோய், பெண்களுக்குண்டாயின்,சுதகத்தல் வெளியாகும் குருதி, தன்னிறம், எடை, அளவு முதலியன குறைந்து வெளியாகும்.

சிலருக்கு அளவு கடந்து வெளியாகும். குழந்தைகளுக்கும் பெரியவர்களுக்கு முண்டாகும் வயிற்றுப்புழு நோய், குருதியழல் நோய் ஆகியவற்றிருக்கும் இந்நோய் துணைநோயாக அமையும்.

அழல் உடலோர்க்கு இந்நோய் பிறக்குமாயின், முதலில் பசித்தீயைக் கெடுத்து உண்ட உணவு செரியாமை, உடல் எரிச்சல், சுரம் உள்ளது போன்று வெப்புத்தோன்றல், நாவெளுத்துச் சிவத்தல், அல்லது பட்டுத் துணிபோல் வழுவழுத்தல்ஈ உணவை மெல்லவும், விழுங்கவும், முடியாமை சிறிது பித்த நீர்கலந்து அடிக்கடி வாந்தியாதல், வாய்க்கைப்பு வயிற்றுநோய், வயிறு கடுத்து நுரைநுரையாகக் கழிதல் என்னுங் குறிகள் உண்டாகும்.

இவை நாளக்குநாள் மிகந்து கொண்டே வருமாயின் உடலின் குருதியின் அளவு, எடை, நிறம், யாவம் குறைந்து உடல் மஞ்சள் பூத்தது போன்றாகி மஞ்சள் (காமாலை) நோயினைப் போலக் காணப்படும். நோய் பெருகிய நிலையில் ஆயாசம், இளைப்பு, பெருமூச்சு, பெருங்கழிச்சல், உணவை வெறுத்தல், வன்மை , இழத்தல், உடல் ஊதல் என்னுங் கொடியதான குறிகுணங்களும் தொடரும்.

குற்ற முதலிய வேறுபாடுகள்:

முன்பு நோய் வருவழியில் கூறியவாற, உடல்வன்மை குறைந்து பசித்தீ கேடடைந்து உண்ட, உணவு சரியாகச் , செரியமாற் போகும். உணவின் கேட்டால் இரச குருதிகளுக்கு ஊட்டம் பெறா, அதனால் அவைகளுக்கு தோலுக்கு நிறத்தைக் கொடுக்கும். அழல் (இரஞ்சித பித்தமும்) மெலிந்து, நிறத்திலும் உடையிலும் குறைந்து தீக்குற்றத்தைப் பெருக்கும்.

அதனளவாக மற்றைய குற்றங்களும் தன்னிலையில் திரிந்து பரவுகாலின் வன்மையைக் கெடுத்து நோயை உண்டாக்கும். நோயின் வன்மை பெருகப் பெருக, ஐயமும் பெருகி வீக்கம் முதலியவைகளையும் துணைகொள்ளச் செய்யும்.

நாடி:

"சேத்தும நாடி யிளகினால் பாண்டாகும்"

கண்டாயோ சிலேற் பனத்தில் வாதநாடி கலந்திடுகில்

.....

.....பாண்டு"

[47]ANAEMIA

Other names:

- Iron poor blood
- Low blood
- Tired blood.

Definition:

Ancient Greek meaning “without blood”.Anaemia refers to a state in which the level of hemoglobin in the blood is below the normal range appropriate for age and sex .It is also defined as a qualitative or quantitative deficiency of hemoglobin, a molecule found inside red blood cells.

Since hemoglobin normally carries oxygen from the lungs to the tissues, anemia leads to hypoxia (lack of oxygen) in organs. Since all human cells depend on oxygen for survival, varying anemia is also caused by a lack of iron in the body.

The clinical features of anemia reflect diminished oxygen supply to the tissues and depend upon the degree of anaemia, the rapidity of its development and the presence of cardio respiratory disease.

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[47] Davidsons Principles and Practice of Medicine

Anemic ranges of hemoglobin:

- Adult men: < 13.0
- Non pregnant women: < 12.0
- Pregnant women: < 11.0

Grading of anemia:

WHO grades anemia according to hemoglobin level as follows,

- Hb between 10 gm and cut off point for age -Mild
- Hb between 7 to 10 gm -Moderate
- Hb under 7 gm -Severe
- Hb under 5 gm -Very severe.

Classification of anaemia:

1. Morphological classification
    - Normocytic anemia
    - Microcytic anemia
    - Macrocytic anemia
2. Pathological classification
    - Anaemia due to blood loss

- Anemia due to impaired red cell production
- Anemia due to increased cell destruction

Causes of anemia:

- Lack of iron, it B12 and folate
- Hypoplasia
- Invasion by malignant cells
- Blood loss
- Hemoglobin
- Hypersplenism
- The three main causes are
- Heavy blood loss
- Lack of RBC production
- High rates of RBC destruction.

IRON DEFICIENCY ANAEMIA

Iron deficiency anemia is the most common and widespread nutritional disorder in the world. The numbers are staggering; 2 billion people over 30% of the world's population are anaemic, many due to iron deficiency.

Structure of the red corpuscles in IDA:

In Iron deficiency anaemia, the red blood corpuscles are decreased or normal in the number and hemoglobin content of the red blood corpuscles is reduced. In the blood smear, the red cells appear pale with a large central pale area and many of the RBC appears to be smaller than the normal. This type of anemia is called “Hypo chromic and Microcytic anemia”.

Etiological factors:

- Increased physiological requirements
- Decreased iron stores
- Decreased iron assimilation
- Blood loss
- Increased demands.

Pathogenesis:

IDA develops when the supply of iron to the bone marrow is insufficient for the requirements of hemoglobin synthesis. It has been pointed out that the body is normally in a state of positive iron balance.

When a negative balance occurs due to blood loss, increased requirements or impaired absorption, the deficit is made good by iron mobilized from the tissue stores and an adequate supply of iron for hemoglobin formation is maintained. It is only when the tissue stores are

exhausted and the supply of iron to the marrow for hemoglobin synthesis becomes inadequate, hypochromic anemia develops.

Stage of iron deficiency anemia:

1. Storage iron depletion

Iron reserve is small or absent and is characterized by reduced serum ferritin or reduced iron concentration in marrow and liver tissue .Hemoglobin serum iron, transferritin concentration and saturation are within normal limits.

2. Iron limited erythropoiesis

Hb may still be normal but serum iron is low and TIBC increased with a low serum ferritin and raised free erythrocyte protoporphyrin (FEP).

3. Iron deficiency anemia

The flow of iron to erythroid marrow is impaired to cause reduction in hemoglobin concentration with a progressive microcytic hypo chromic anemia associated with the reduced serum iron, transferrin saturation and serum ferritin level.

Symptoms and Signs

- Pallor of the skin, mucous membrane, palms, nails and conjunctiva.
- Weakness, Dizziness
- Headache, Giddiness

- Breathlessness, Tachycardia
- Loss of appetite, Constipation
- Angular stomatitis, Glossitis
- Pica.

Complications:

Iron deficiency anemia may be the present finding in gastrointestinal cancer.

In patients with heart disease severe anemia may precipitate angina pectoris or congestive heart failure.

Infections are common in IDA, especially those of the respiratory, gastrointestinal and urinary tracts.

Investigation:

- Hemoglobin level
- Heamatocrit values (PCV, MCV, and MCHC)
- Blood smear study
- Iron binding capacity
- Serum ferritin
- Serum iron
- Fecal occult blood test if present any gastro intestinal disorders.

Prevention:

- Cow's milk consumption
- Iron fortified cereal and formulas
- Well balanced diet.
- Good choices include iron fortified grains and cereals, red meat, egg yolk, leafy green vegetables, yellow vegetables and fruits.

[48]Some facts of iron (Bio-chemical Aspects)

- About 65% of iron is in the form at Haemoglobin
- About 4% of iron is in the form of myoslobin.
- About 1% of iron is in the form of Haema Compounds
- An average diet contains about 10-15 mgm of iron per day
- Normal human absorbs about 0.5 to 1mgm of dietary iron per day
- Anaemic human absorbs about 1.5 to 2mgm of dietary iron per day
- For a rise of 1% of Haemoglobin in one week the bone marrow need of 25mgm of iron per day.

IRON Metabolism:

Absorption of iron takes place from almost all parts of the small intestine by the following mechanism. A substance called apotransferrin

[48] British Foundation of nutrition 1995

secreted by the liver flows in the duodenum. There it binds with free iron and iron compound haemoslobin and myoglobin to from transferrin. Transferrin binds with receptors of intestinal epithelial cells. Now transferring molecule carrying iron is absorbed into the epithelial cells and released in the form of plasma transferrin. Ascorbic acid, citric acid, amino acids, and sugars in the diet enhance absorption of iron.

Storage of excessive iron in the blood is deposited in all cells especially in the liver Hepatocytes. A smaller amount being stored in reticuoendothelial cells of the bone marrow. In the cell cytoplasm it combines with apoferritin to form ferritin. This iron stored as ferretin is called storage iron some iron is stored in as soluble form haemosiderin.

The subsequent stages of Fe(iron) absorption are outlined below.

1) Ferrous iron $\xrightarrow{\text{Oxidised}}$ Ferric Hydroxide (enter mucosa)

2) Ferric Hydroxide combines with protein $\xrightarrow{\text{(Apoferritin – unstable)}}$ Ferritin (Stable)

Normally, the total body iron is divided into functional and storage comportments approximately 80% of the functional from is found in Haemoglobin.

Liver, spleen kidneys (Storage Fe)	RBC (Hb Fe)	Liver, spleen kidneys (Storage Fe)	Cellos (parenchymal Fe)
Ferritin and Hemosiderin from break down, of RBC	Transport iron in plasma attached to protein siderophilin level reflects storage Fe	7%	Essential Fe for all cells not available for the Hb combination
20%	58%		15%

[49]IRON STORAGE:

Tissue stores provide a buffer for events that upset the balance of iron turnover between the erythron and macrophages when the rate of red cells production exceeds the rate of destruction (Such as occurs following acute blood loss) iron is mobilized from stores to satisfy the needs of an expanded erythroid effort. When red cell destruction exceeds production surplus iron is diverted to stores for later use. Tissue stores of iron exist in two related forms. The soluble, readily available storage fraction is known as ferritin, the insoluable more stable fraction is known as hemosiderin.

The lost of Iron from the Body

[49] Iron and your health ; facts and fallacies CRS press Inc 1992

- ❖ Mainly iron is lost from the body by Desquamation
- ❖ Excessive sweating.
- ❖ About 1 mg of iron is excreted through faeces each day.
- ❖ Whenever bleeding occurs additional quantity of iron is lost.
- ❖ In women, about 20 mg iron per period is lost during menstrual cycle.

LATERAL RESEARCH WORK

1. Princlinical evaluation of haematinic and hepato protective effect Mandura Chenduram. Internal journal of pharmacy and pharmaceutical sciences volume 4, suppl 2, 2012.
2. Some observation on the metal based preparations in the Indian systems of Medicine. Indian journal of Traditional Knowledge vol.9 (3), July 2010, PP. 562 – 575.
3. Standardization of Bhasma – Importance and prospects journal of pharmach Research 2011; 4(6), 1931-1933.
4. Ayurvedic bhas ma : the most ancient application of nano medicine. Journal of scientific of industrial Research Vol.69, December 2010, pp.901-905.

MATERIALS AND METHODS

Collection of the drug:

Mandooram was bought from Gopalan asan shop, Nagercoil.

Purification of Mandooram:

Mandooram powder was heated strongly and dipped in cow's urine for ten times

Preparations:

- Purified Mandooram
- Karisalai Juice

Process:

The purified Mandooram was powdered and ground well in mortar with Karisalai juice for 2 samam (6hours) per day for 3 days and made into a villai and dried. Then the dried villai was kept inside an earthen plate, sealed well using clay vloth and burnt (pudam) with 30 cow-dung cakes. Then the villai was taken and ground with Karisalai juice and subjected to pudam with the above process.

The whole process was repeated again for five times to get a fine chenduram. The chenduram was powdered well and then preserved in an air tight container.

Dose:

100mg two times a day after meals with honey.

Route of Administration

Enteral route

This prepared Mandoora chenduram used for the following methods.

- Bio – chemical
- Pharmacological analysis
- Acute toxicity study
- Microbiological analysis
- Clinical studies.

PHYSICO-CHEMICAL ANALYSIS

PROCEDURES

Total ash

Two grams of grounded air-dried material was accurately weighed in a previously ignited and tared silica crucible. The drug was gradually ignited by raising the temperature to 450°C until it was white. The sample was cooled in a desiccator and weighed. The percentage of total ash was calculated with reference to air-dried drug.

Acid Insoluble ash

The ash was boiled with 25 ml of 2 M hydrochloric acid for 5 minutes, the insoluble matter was collected on an ash less filter paper, washed with hot water, ignited, cooled in a desiccator, and weighed. The percentage of acid insoluble ash was calculated with reference to the air-dried drug.

Water Soluble ash

The ash was boiled with 25 ml of water for 5 minutes, the insoluble matter on ash less filter paper collected, washed with hot water, ignited, cooled in a desiccator, and weighed. The weight of the insoluble matter from the weight of the total ash was subtracted; the difference represents the water

soluble ash. The percentage of water insoluble ash was calculated with reference to the air-dried drug.

Moisture content:

The shade-dried drug was grounded in a mixer grinder. The powder passed through #40 and retained on #120. Accurately weighed 10 g of # 40/120 drug powder was kept in a tared evaporating dish. This was dried at 105°C for 5 hours in tray drier and weighed. The drying was continued and weighing was done at one-hour interval until difference between two successive weighings corresponds to not more than 0.25 percent.

Drying was continued until a constant weight was reached with two successive weighings after drying for 30 minutes and cooling for 30 minutes in a desiccator was showing not more than 0.01 g difference.

Potential of Hydrogen (pH):

The pH scale is logarithmic and runs from 0.0 to 14.0 with 7.0 being neutral. Readings less than 7.0 indicate acidic solutions, while higher readings indicate alkaline or base solutions.

BIO CHEMICAL ANALYSIS OF MANDOORA CHENDURAM

Preparation of the extract:

100mgs of chcnduram is weighed accurately and placed in a clean beaker and evaporated it well. After evaporation cooled the content and added a few drops of cone. Nitric acid and evaporated it well. After cooling the content add 20ml of distilled water and dissolved it well. Then it is transferred to 100ml volumetric flask and made up to 100ml with distilled water. Mid well filter it. Then it is taken for analysis.

QUALITATIVE ANALYSIS

S.No.	EXPERIMENT	OBSERVATION	INFERENCE
1.	**TEST FOR CALCIUM** 2ml of the above prepared extract is taken in a clean test tube. To this add 2ml of 4% ammonium oxalate Solution.	A white precipitate is formed	Indicate the presence of calcium
2.	**TEST FOR SULPHATE** 2ml of the extract is added to 5% Barium chloride solution.	A white precipitate is formed	Indicate the presence of sulphate
3.	**TEST FOR CHLORIDE** The extract is treated with Silver nitrate Solution.	A white precipitate is formed	Indicates the presence ofchloride

4.	**TEST FOR CARBONATE** The substance is treated with Concentrated HCL.	No brisk effervescence is formed	Absence of carbonate
5.	**TEST FOR FERRIC IRON** The extract is acidified with Glacial acetic acid and add Potassium ferro cyanide.	No blue colour is formed	Absence of Ferric iron
6	**TEST FOR FERROUS IRON** The extract is treated with Concentrated nitric acid and Ammonium thio cyanate solution.	Blood red colour is formed	Indicates the presence of Ferrous iron
7.	**TEST FOR PHOSPHATE** The extract is treated with ammonium Molybdate and concentrated nitric acid.	No yellow precipitate is formed	Absence of phosphate
8	**TEST FOR ALBUMIN** The extract is treated with Esbatch's Reagent.	No yellow precipitate is formed	Absence of albumin

9.	**TEST FOR TANNIC ACID** The extract is treated with ferric Chloride.	No black precipitate is formed	Absence of tannic acid
10.	**TEST FOR UNSATURATION** Potassium permanganate solution is added to the extract.	It does not get decolourised	Absence of unsaturated compound
11.	**TEST FOR THE REDUCING SUGAR** 5ml of Benedict's qualitative Solution is taken in a test tube and allowed to boil for 2 mins and add 8-10 drops of the extract and again boil it for 2 mins.	No colour change occours	Absence of reducing sugar
12.	**TEST FOR AMINO ACID** One or two drops of the extract is placed on a filter paper and dried it well. After drying 1% Ninhydrin is sprayed over the same and dried it well.	No violet colour is formed	Absence of amino acids

13.	**TEST FOR ZINC** The extract is treated with Potassium ferrocyanide.	No white precipitate is formed	Absence of zinc

INFERENCE:

The given sample Mandoora Chenduram indicates the presence of Calcium, Sulphate, Chloride and Ferrous compounds.

PHARMACOLOGICAL ANALYSIS OF TRIAL MEDICINES

STUDY ON THE HAEMATINIC EFFECT OF MANDOORA CHOORANAM ON RATS.

Variety of preparations in siddha system of medicine arc well known for its haematinic effects of which Mandoora Chooranam is one of the best. To prove the efficacy of Mandoora chooranam an attempt was made to study its effect using "Albino rats" for this purpose rats are made anaemic by the following procedure.

Artificially induced iron deficiency:

The albino rats taken for this experiment were kept in aluminum cages and provided with drinking water and milk, free from iron. The administration of the iron preparation under investigation was started when the hemoglobin level fall to 6-6.5 gram / 100ml. At the beginning of the experiment Hb% were determined.

Study on rates

The albino rats were first divided into 2 equal groups with five rats in each group the first group received Mandoora ehooranam 20mg / 100gm body weight with hot water. The second group received normal diet. All the above procedures were continued for five weeks in once a day the hemoglobin levels of rats were measured I, II, III, IV, V weeks. The results observed are tabulated in the following chart.

HEMATINIC ACTION OF MANDOORA CHENDURAM

S.No.	Drug & Date	Dose	Initial Reading	I Week	II Week	III Week	IV Week	V Week	Result
1.	Control (water)	Normal Diet.	6.0 6.2 6.3 6.2 6.0	7.0 7.2 7.4 7.4 7.0	8.2 8.0 8.4 8.2 8.2	9.4 9.2 9.4 9.4 9.5	11.0 11.2 11.2 11.0 11.4	12.5 13.0 12.8 13.0 12.6	12.8%
2.	MANDOORA CHENDURAM	20 mg/ 1ml In 100gm b/wt	5.2 6.2 6.0 6.4 6.2	5.8 6.2 6.0 6.8 6.5	5.6 7.5 7.4 7.4 7.5	8.2 8.0 8.0 8.2 8.0	8.8 8.7 8.8 8.7 8.6	9.5 9.7 9.6 9.8 9.6	9.6%

DISCUSSION

This table shows that Mandoora chenduram in my research work has a good haematinic property.From these studies it is clear that these medicine, Mandoora chendooram with Honey acts good in paandu noi.

ANTI – MICROBIAL ACTIVITY

BY KIRBY BAUER METHOD

Aim:

To determine the Antimicrobial activity of "Mandoora Chenduram"

Components of Muller Hintan Agar Medium:

Beef Extract	-	300 gms /lit
Agar	-	17 gms /lit
Starch	-	1.5 gms / lit
Casein Hydroxylate	-	17.5 gms/lit
Distilled water	-	1000 ml.
PH	-	7.6

Procedure:

The method of antimicrobial activity study is UPS Diffusion Method.

Antibiotic discs are prepared with known concentration of antibiotic are placed on agar plates that has been inoculated with the known pathogenic micro organism.

The antibiotic diffuses through the agar producing an antibiotic concentration, gradient antimicrobial susceptibility is proportional to the diameter of the inhibitory zone around the disc.

If the micro organism which grows upto the edge of the disc are resistant to the antimicrobial agent.

The recommended medium in this method is Muller Hinton Agar, its PH should be between 7.2 – 7.6 and should be poured to uniform thickness of 4mm in the petri plate (25ml)

Methodology:

- Muller Hinton Agar plates are prepared and Escherichia coli, Candida albicans, Staphylococcus aureus, Streptococcus pneumoniae and Pseudomonas aeruginosa are inoculated separately.
- The prepared discs of Mandoora Chenduram are placed over the incubated plate using sterile forceps and incubated for 24 hours at 37 celcius.
- The plates after 24 hours incubation are observed for the zone of inhibition.

Result:

S.No.	Test Drug	Organism (culture)	Susceptibility
1.	Mandoora Chenduram	Escherichia coli	Resistant
2.		Candida albicans	Resistant
3.		Staphylococcus aureus	Resistant
4.		Streptococcus pneumoniae	Resistant
5.		Pseudomonas aeruginosa	Resistant

Report:

The test drug **Mandoora Chenduram** has no anti-microbial activity.

ACUTE TOXICITY STUDY

Animal used for the study:

Wister albino rats bred in the animal house attached to the Post Graduate Pharmacology Department, Govt. Siddha Medical College, Palayamkottai were used.

Sex:

Animals of both sexes were used.

Weight:

Animals weighing 100-120gms were selected.

Food and water:

The animals were maintained with standard laboratory pellet food and water ad-Libitum.

Preparation of Animals:

The animals were randomly selected and were marked with picric acid on for and kept in their cages for five days prior to dosing, to allow acclimatization to the laboratory conditions.

Separation of Animals in Groups:

10 rats were divided into 5 groups each consisting of 2 rats, one group is kept as control group by giving water alone.

Dose Levels:

The following dose levels were arbitrarily fixed by persuming range of least toxic to high toxic doses.

I Group - 40 mg/kg body weight of animal

II Group - 80 mg/kg body weight of animal

III Group - 160 mg/kg body weight of animal

IV Group - 320 mg/kg body weight of animal

V Group - 640 mg/kg body weight of animal

Route of Administration:

The drug was administered orally.

Test Dose Preparation:

The preparation was done in such a way as 1ml of the suspension contained 40mg of test drug and administered as given above in each group. The drug was administered once on the day of the experiment and there after other 24 hour parameters were used.

Experimental set up:

All the five groups were fasted for over night prior to dosing. Following the period of fasting the animals were weighed and test substance was administered through **"Rat oral intubation tube"**.

After the administration of the test drug, food was withheld for 1 to 2hrs.

OBSERVATION:

The following parameters were noted.

Central effects:

I. Stimulation

- ❖ Hyper activity
- ❖ Piloerection
- ❖ Twitching
- ❖ Rigidity
- ❖ Irritability
- ❖ Jumping
- ❖ Colonic convulsion
- ❖ Tonic convulsion

II. Depression

- ❖ Ptosis
- ❖ Sedation
- ❖ Sleep
- ❖ Loss of traction
- ❖ Loss of Pinna reflex

- ❖ Ataxia
- ❖ Catatonia
- ❖ Loss of muscle tone
- ❖ Analgesia

Autonomic Effect:

- ❖ Straub's tail flicking
- ❖ Laboured respiration
- ❖ Cyanosis
- ❖ Blanching
- ❖ Reddening
- ❖ Abnormal secretions

At the end of 24 hrs, the number of animals dead in each group was noted and the approximate LD_{50} was determined. The animals were morphologically examined for any toxic symptoms.

Result:

During the acute toxicity study none of the albino rat was found dead. During morphological examination of the rats no toxic symptoms were found. This proves the safety of the test drug.

SCANNING ELECTRON MICROSCOPE

Resolution:

1.2 nm gold particle separation on a carbon substrate

Magnification:

From a min of 12x to greater than 1, 00,000 X

The Scanning Electron Microscope (SEM) is a microscope that was electrons rather than light to form an image. There are many advantages to using the SEM instead of a light microscope.

The SEM has a large depth of field, which allows a large amount of the sample to be in focus at one time.

The SEM also produces images of high resolution, which means that closely spaced features can be examined at a high magnification. Preparation of the samples is relatively easy since most SEM one require the sample to be conductive.

The combination of higher magnification, larger depth of focus, greater resolution, and easy of sample observation marks the SEM one of the most heavily used instruments in research areas today.

FOURIER TRANSFORM INFRARED SPECTROSCOPY (FTIR)

Instrument details:

Model : Spectrum one: FT-IR Spectrometer

Scan Range : MIR 450-4000 cm-1

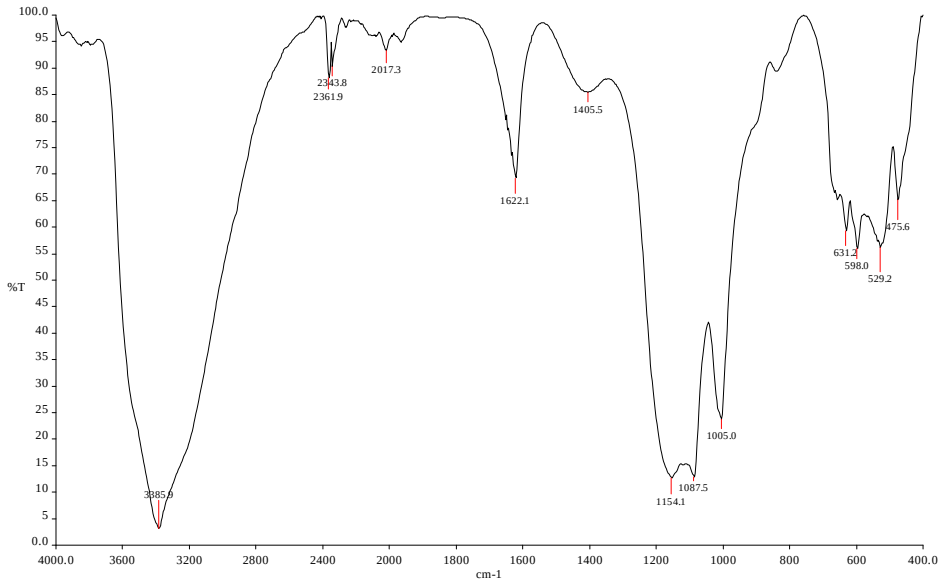
Resolution :1.0 cm-1

Sample required: 50 mg, solid or liquid.

Fourier Transform Infrared Spectroscopy (FTIR) is an analytical technique used to identify mainly organic materials. FTIR analysis results in absorption spectra which provide information about the chemical bonds and molecular structure of a material. The FTIR spectrum is equivalent to the "fingerprint" of the material and can be compared with cataloged FTIR spectra to identify the material.

Fourier Transforms Infrared Spectroscopy analytical capabilities:

- Identifies chemical bond functional groups by the absorption of infrared radiation which excites vibrational modes in the bond.
- Especially capable of identifying the chemical bonds of organic materials Detects and Identifies organic contaminants.
- Identifies water, phosphates, sulphates, nitrates, nitrites, and ammonium ions.



~2.SP

3601 4000.0 400.0 3.1 100.0 4.0 %T 4 2.0

PT

REF 4000 99.3 2000 95.6 600

3385.9 3.1 2361.9 88.2 2343.8 90.3 2017.3 93.2 1622.1 69.2

1405.5 85.4 1154.1 12.7 1087.5 12.8 1005.0 23.7 631.2 59.4

598.0 55.8 529.2 56.2 475.6 65.1

END 13 PEAK(S) FOUND

COMMENTS:

- 475 – is due the Fe-O frequency
- 529-skeleton C-C vibration, alkyl groups stretching vibration
- 1154 is due to the presence ether functional group present in the Eclipta prostatae
- 622-keto group
- 2361 and 2343 is due to the carboxylate group
- 3385-O-H groups in the Eclipta prostatae,

INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROMETRY (ICP-OES)

Inductively coupled plasma atomic emission spectroscopy (ICP-AES), also referred to as inductively coupled plasma optical emission spectrometry (ICP-OES), is an analytical technique used for the detection of trace metals.

It is a type of emission spectroscopy that uses the inductively coupled plasma to produce excited atoms and ions that emit electromagnetic radiation at wavelengths characteristic of a particular element.

The intensity of this emission is indicative of the concentration of the element within the sample.

CLINICAL ASSESSMENT

A clinical trial on Paandu noi is carried out at the Govt. Siddha Medical College Hospital, Palayamkottai.

40 cases with clinical signs and symptoms of paandu Noi of both sexes with age ranging from 20-60 years are selected and treated.

Case selection:

The patients are selected as Paandu noi according to the following including and excluding criteria.

DESIGN OF THE STUDY:

Open Clinical trial, Phase II B

Inclusion Creteria:

- Pallor of conjunctiva and nail beds
- Anorexia
- Ulceration of mouth
- Diarrhoea
- Lassitude
- Emaciation
- Palpitation
- Dysnoea on exertion

Exclusion Criteria

- Worm infestation
- Chronic renal failure
- Myxoedema
- Thalassemia
- Chronic liver failure

CLINICAL PATHOLOGICAL EXAMINATION:

Blood test:

- Total count Differential count
- Polymorphs
- Lymphocytes
- Eosinophils
- Hemoglobin
- Erythrocyte sedimentation rate
- Blood sugar
- Blood urea

URINE EXAMINATION:

- Albumin
- Sugar
- Deposits

LINE OF TREATMENT:

- The drug Mandoora chendooram was administered orally in a dose of l00gm two times a day with Honey after meals.

DIET AND MEDICAL ADVICE:

- Iron rich diet
- Green leafy vegetables
- Fruits
- Meat
- Sea foods
- Nuts
- Cereals
- E g g s
- Foods high in vitamin C like citrus fruits, tomatoes helps the body absorbing iron from food.
- Increase dietary fibre to prevent constipation
- Eat fresh uncooked fruits and vegetables often. Don't eat over cooked food

Observation

The haematinic action of Mandoora chenduram was observed on the basis of the relief of symptoms and confirmed by routine lab investigations.

The clinical improvement was recorded for every seven days. The laboratory investigations were done for the patients before and after treatment. At last the prognosis was noted.

Results

Among the 40 patients selected, 29 patients showed good response 9 patient showed fair response and remaining 2 patients showed poor response.

Table 1. Illustrating the sex Distribution

S. No	Sex	No. of patients	Percentage
1	Male	11	27.50%
2	Female	29	72.50%
	Total	40	100%

Table 2. Illustrating the age Distribution

S.No	Age in years	No. of patients	Percentage
1	20-40	18	45%
2	41-60	22	55%
	Total	40	100%

Table 3. Illustrating the Prognosis

S.No	Prognosis	No. of patients	Percentage
1	Good	29	72.50%
2	Fair	9	22.50%
3	Poor	2	5%
	Total	40	100%

BIO – STATISTICAL ANALYSIS

The clinical trials of the drug **Mandoora Chenduram** are differentiated in terms of percentages. The effectiveness of the drug is assessed by Non parametric chi-square and Binomial test (Z proportion test) within the groups. The responses of the patients to the drug are analyzed in terms of proportions. The above statistical procedures are performed by the statistical package S.P.S.S (13.0) The P-values is set at 0.05 which is considered as statistically significant.

Description of the study subjects:

The study subjects of **Mandoora Chenduram** were described according to their sex and age.

Table 1: Sex wise distribution of clinical trials.

Age group (Years)	Males		Females		Total	
	n	%	N	%	n	%
20-29	1	9.09	4	13.79	**5**	12.50
30-30	1	9.09	10	34.48	11	27.5
40-49	6	54.5	8	27.58	14	35
50-59	2	18.18	6	20.68	8	20
60-69	1	9.09	1	3.4	2	5
Total	11	100	29	100	40	100

The table -1 above shows that the male participation was 27.5% and the female is 72.5% and are normally distributed about the mean age.

Table – 2 Comparison of male and female according to their age.

Sex	**Age (Years)**		**'t'**	**d.f**	**Significance P**
	Mean	**S.D**			
Male	46.5	9.07	0.05	38	P>0.05
Female	39.5	11.14			

The study subjects are compared with reference to their age and sex in the above table – 2. The mean ages of male and female were 46.5±11.14 years respectively. The difference of mean age 7 years between the sexes was not statistically significant (P>0.05). The subjects selected for the study are same regarding the age. Now it is very clear that the age and sex may not a confounding factor for the test drug.

Effectiveness of Mandoora Chenduram in the control of Paandu:

The effectiveness of Mandoora Chenduram was studied by comparing the haemoglobin level before and after treatment of the patients. Similarly the MCV and PCV levels were also compared between the before and after treatment. The following table explain the above analysis.

Table – 3: Effectiveness of

Mandoora Chenduram in Controlling the Paandu

Variables	**No**	**Before treatment**		**After treatment**		**Increase**		**'t'**	**D.S**	**Significance**
Hb	40	9	0.5	10.3	0.5	1.3	0.5	8.4	39	P<0.001
MCV	20	84.9	4.2	93.7	6.4	8.8	3	7.41	39	P<0.001
PCV	20	31.3	2.6	39.8	3.0	8.5	2.8	6.41	39	P<0.001

The above table – 3 evaluates the effectiveness of **Mandoora Chenduram** for controlling the Paandu. The mean haemoglobin level before the treatment was 9.0 ± 0.5 and the same after the treatment was 10.3 ± 0.5 (mg). The mean increase was 1.3 ± 0.5 mg. The mean increase was statistically figure 't' early (t =8.4 d.f = 39 and P<0.001). Similarly the MCV and PCV before treatment were 84.9 ±4.2 and 31.34 ± 2.6 respectively. The same after treatment were 93.7 ±6.4 and 39.8 ± 3.0 respectively. The mean increase of MCV and PCV were 8.8 ± 3.0 and 8.5 ± 2.8 respectively. The mean increase of MCV was significant (t = 7.41 d.f =19 and P<0.001). Similarly the mean increase of PCV was also significant (t=6.41 d.f = 19 and P<0.001).

Prognosis of Mandoora Chenduram:

The prognosis of **Mandoora Chenduram** was diagnosed as Good, Fair and Poor based on the improvements of variables haemoglobin, MCV and PCV.

Table -4 Percentage distribution of the prognosis

Response	**Subsides**	
	No	**%**
Good	29	72.5
Fair	9	22.5
Poor	2	5
Total	40	100.0

The above table -4explains the response of the drug. Among the 40 patients 29 (72.5%) had shown Good response, 9 (22.5%) had shown Fair response and only 2 (5%) had shown Poor response.

The above results clearly shows that the drug Mandoora Chenduram improves the haemoglobin level, MCV and PCV level significantly from before treatment to after treatment ($P<0.001$)

DISCUSSION

The drug Mandoora chenduram is selected to study its therapeutic efficacy in the management of paandu not as per siddha literatures. The drug is prepared and given to in-patients at the dose 100mg BD with honey after meals. The drug is subjected to Bio-chemical and pharmacological analysis.

Bio - Chemical analysis shows that the Mandoora chenduram contains, calcium, sulphate, chloride, ferrous iron and absence of carbonate, zinc, ferric iron, phosphate, albumin, tannic acid, unsaturated compound, reducing sugar, amino acid.

CALCIUM:

Calcium ion are necessary for the maintainence and regulation of acid-base balance and water balance in the body.

FERROUS IRON:

The presence of ferrous iron improves the formation of haemoglobin in the blood.

Pharmacological analysis of mandoora chenduram is clone in the department of pharmacology. Govt. Siddha Medical College Palayamkottai. This results reveals that the drug has good haematinic effect.

The SEM analysis of the drug signifies good nano particle size that indicates absorption was very good and pharmaco therapeutic value was good.

According to ICP results, the trial drug contains large amount of Fe (812.428mg/L), which favours the formation of haemoglobin.

Copper is necessary for the absorption of iron in gastro intestinal tract.

Cobalt is essential for utilization of iron during haemoglobin formation.

The heavy/ toxic elements concentration is below the detectable limit, hence it is a safe drug.

The FTIR and the physic-chemical analysis were done and reports are observed.

According to Siddha maruthuvam among the vital forces, Pitham is mainly affected in Paandu Noi. Following pitham, kabam and vatham are also derranged. So the principle aim in the treatment, aspects is to make the deranged vital forces normal by giving the trial drug. Before starting the actual treatment efforts are made to normalize the derranged thathus. This is explained in siddha as follows.

"சத்தியால் பித்தந் தாழும்

பேதியால் வாதந் தாழும்

அஞ்சனத்தால் கபந் தாழும்

Usually for pitha diseases emetics are to be given to alter the deranged pitham. But there are some exceptions to this rule. For instance in paandu noi, since the patient is already weak and drowsy the administration of emetic drug is excluded from the line of treatment.

The trial medicine have the properties of neutralizing pitham, Because pitham is compensated by astringent and bitter tastes.

In this study all the 40 cases were treated with mandoora chenduram, which showed 72.5% good response, 22.5% showed fair response and 5% showed poor response.

Bio-statistical analysis showed that the drug is very effective in controlling Paandu.

The improvement was proved by the alleviation of signs and symptoms present before the treatment.

During the clinical trial the patients showed no adverse reactions.

SUMMARY

- In this dissertation, the test drug Mandoora Chendooram (Ferroso Ferric Oxide) was selected to find out its efficacy of haematinic actions in Paandu Noi. The test drug was administered at a dose of 100gm twice a day with Honey.
- The basic informations about the test drug collected from various siddha, literatures were reviewed.
- Bio-chemical analysis established that the drug contains. Calcium, Sulphate, ferrous iron and absence of carbonate, zinc, ferric iron, phosphate, albumin, Tannic acid unsaturated compound reducing sugar, Amino acid.
- Pharmacological study reveals significant effect of haematinic action of the test drug.
- The clinical study taken for 40 patients, showed good response for 72.5% During the clinical trail some patients have constipation. No other significant side effect are seen.
- The test drug Mandoora Chcndooram is found to be effective and safe for paandu not on the basis of haematinic action.

CONCLUSION

It is concluded that the test drug Mandoora Chendooram (Ferroso Ferric Oxide) has got good haematinic action. So it is clinically effective in Paandu noi.

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32.Bhogar Nigandu

33.Panchakaaviyam Nigandu

SOPHISTICATED ANALYTICAL INSTRUMENT FACILITY

IITM, CHENNAI-36

PERKIN ELMER OPTIMA 5300DV ICP-OES

Sample ID	**Analyte**	**Mean**
Mandoora Chenduram		
	As193.696	BDL
	Bi 306.772	04.245 mg/L
	Cd 226.502	BDL
	Cu 324.754	06.141 mg/L
	Co 228.616	05.185 mg/L
	Fe 238.204	812.428 mg/L
	Hg253.652	BDL
	Ni 58.693	BDL
	Pb 230.204	BDL
	Sb 206.833	21.81mg/L
	Zn 213.856	38.428 mg/L
	BDL=Below	detection limit

1.Drug : Yannai nerunjil chooranam-1g					**Diagnosis :**Kalladaippu
O.P.NO:40757	**Name:Joice**	**Age/Sex:33**/F	**From:**31/05/2012	**To:**12/07/2012	**No.Of Days Treated:**43
Complaints And Durations:pain in the loin region radiations towards the groin,burning micturition since 1 month					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8400cells/cumm	**Albmin;**Nil	R.T.KIDNEY:Normal L.T.KIDNEY:A calculus of size 5mm is seen UB:Normal IMPRESSION:Lt Renal Calculus	**Tc:**8200cells/cumm	**Albmin:**Nil	R.T.KIDNEY: Normal L.T.KIDNEY:A calculus of size 1mm is seen UB: Normal IMPRESSION:Lt Renal Calculus OBSERVATION:Good Response
Dc:	**Sugar:**Nil		**Dc:**	**Sugar:**Nil	
P:62%	**Deposits:**		**P:**64%	**Deposits:**NAD	
L:32%	1-5 pus cells 2-3epicells		**L:**34%		
E:2%			**E:**2%		
ESR:1/2 Hr.5mm 1Hr. 10mm			**ESR:** 1/2 Hr.6mm 1Hr.10mm		
Hb:72%			**Hb:**74%		
Sugar:84mgs%			**Sugar:**88mgs%		
Urea:20mgs%			**Urea:**18mgs%		

2.Drug : Yannai nerunjil chooranam-1g					**Diagnosis :** Kalladaippu
O.P.NO:42316	**Name:Kathirvel**	**Age/Sex:44**/M	**From:** 31/05/2012	**To:** 12/07/2012	**No.Of Days Treated:**43
Complaints And Durations: pain in the loin region ,burning micturition since 1 year					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7200cells/cumm	Albmin:Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 8mm is seen UB: Normal IMPRESSION: :Lt Renal Calculus	**Tc:**7400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 3mm is seen UB: Normal IMPRESSION: :Lt Renal Calculus OBSERVATION: Good Response
Dc:	Sugar:Nil		**Dc:**	**Sugar:** Nil	
P:62%	Deposits:NAD		**P:**64%	**Deposits:**NAD	
L:42%			**L:**46%		
E: 4%			**E:**4%		
ESR: 1/2 Hr.2mm 1Hr.4mm			**ESR:** 1/2Hr:2rrmm 1Hr.4mm		
Hb:74mgs%			**Hb:**78mgs%		
Sugar:102mgs%			**Sugar:**104mgs%		
Urea:20mgs%			**Urea:**22mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

3. Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO: 42503	**Name:sethuraman**	**Age/Sex:29**/M	**From:**06/06/2012	**To:**11/07/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region ,burning micturition since 1 month					
INVESTICATIONS:					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8000cells/cumm	**Albmin:** Nil	R.T.KIDNEY: : A calculus of size 3mm is seen L.T.KIDNEY: : Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:6**900cells/cumm	**Albmin:** Nil	R.T.KIDNEY: : : Normal L.T.KIDNEY: : Normal UB: : Normal IMPRESSION: Normal study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:56%	**Deposits:NAD**		**P:**58%	**Deposits:**NAD	
L:36%	5-7 pus cells		**L:**38%		
E:4%			**E:**4%		
ESR:1/2 Hr4mm 1Hr.8mm			**ESR:** 1/2 Hr.30mm 1Hr.26mm		
Hb:85%			**Hb:**87%		
Sugar:85mgs%			**Sugar:**85mgs%		
Urea:16mgs%			**Urea:**16mgs%		

4.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 42508	**Name:** Natarajan	**Age/Sex:67**/M	**From:** 07/06/2012	**To:** 12/07/2012	**No.Of Days Treated:** 36
Complaints And Durations: burning micturition, pain in the loin region ,radiations towards groin since 1 month.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9200cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 8mm is seen L.T.KIDNEY A calculus of size 6mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**9400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 3mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculi OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:68%	Deposits:NAD		**P:**70%	**Deposits:**NAD	
L:26%			**L:**28%		
E: 2%			**E:**4%		
ESR: 1/2 Hr.25mm 1Hr.20mm			**ESR:** 1/2 Hr.36mm 1Hr.40mm		
Hb:84mgs%			**Hb:**86mgs%		
Sugar:110mgs%			**Sugar:**114mgs%		
Urea:20mgs%			**Urea:**24mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

5.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:44233	**Name:**shanmuga suntharam	**Age/Sex:**49/M	**From:**07/06/2012	**To:**12/07/2012	**No.Of Days Treated:** 36
Complaints And Durations: burning micturition,dysuria pain in the loin region since 1 year .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8600cells/cumm	**Albmin:** trace	R.T.KIDNEY: A calculus of size 6mm is seen at VUJ is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**8700cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:68%	**Deposits:**		**P:**70%	**Deposits:**NAD	
L:34%	1-5 pus cells 2-3epicells		**L:**36%		
E:3%			**E:**4%		
ESR:1/2 Hr.20mm 1Hr.45mm			**ESR:** 1/2 Hr.30mm 1Hr.50mm		
Hb:84%			**Hb:**88%		
Sugar:94mgs%			**Sugar:**96mgs%		
Urea:19mgs%			**Urea:**20mgs%		

6.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 44551	**Name:** senthil kumar	**Age/Sex:**28/m	**From:** 07/06/2012	**To:** 12/07/2012	**No.Of Days Treated:** 36
Complaints And Durations: burning micturition, pain in the renal angle ,dysuria since 6 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7400cells/cumm	Albmin: Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 7mm is seen UB: Normal IMPRESSION: Lt Renal Calculus	**Tc:**7600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 1mm is seen UB: Normal IMPRESSIO: Lt Renal Calculus OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:64%	Deposits:		**P:**68%	**Deposits:**NAD	
L:38%	1-2 pus cells		**L:**42%		
E: 2%			**E:**3%		
ESR: 1/2 Hr.30mm 1Hr.20mm			**ESR:** 1/2 Hr.44mm 1Hr.30mm		
Hb:74mgs%			**Hb:**76mgs%		
Sugar:82mgs%			**Sugar:**84mgs%		
Urea:14mgs%			**Urea:**15mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

7.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO: 48453	**Name:** Muthuramalingam	**Age/Sex:40**/m	**From:**14/06/2012	**To:**19/07/2012	**No.Of Days Treated:**35
Complaints And Durations: pain in the flank and groin region , burning micturation since 6 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:6600cells/cumm	**Albmin:**trace	R.T.KIDNEY:A Stag horn calculus of 1.6mm is seen L.T.KIDNEY: A calculus of size 5mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**6800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Astaghorncalculus of size 1.6cm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus OBSERVATION: Poor Response
Dc:	**Sugar:** +		**Dc:**	**Sugar:**+	
P:58%	**Deposits:**		**P:**60%	**Deposits:**NAD	
L:30%	1-2 pus cells		**L:**32%		
E:6%			**E:**4%		
ESR:1/2 Hr.19mm 1Hr.10mm			**ESR:** 1/2 Hr.28mm 1Hr.18mm		
Hb:64%			**Hb:**68%		
Sugar:184mgs%			**Sugar:**190mgs%		
Urea:18mgs%			**Urea:**19mgs%		

8.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 53004	**Name:** Mathebalan	**Age/Sex:53**/m	**From:** 19/07/2012	**To:** 23/08/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region ,burning micturition ,pain in the groin region since 1 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8400cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 7mm at PUJ is seen L.T.KIDNEY: A calculus of size 10mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 3mm is seen UB: Normal IMPRESSION:Lt Renal Calculi OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:60%	Deposits:		**P:**58%	**Deposits:**NAD	
L:34%	1-2 pus cells 2-3 epicells		**L:**36%		
E: 4%			**E:**3%		
ESR: 1/2 Hr.40mm 1Hr.28mm			**ESR:** 1/2 Hr.48mm 1Hr.32mm		
Hb:86mgs%			**Hb:**88mgs%		
Sugar:74mgs%			**Sugar:**78mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

Urea:15mgs%			**Urea:**17mgs%		
9.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:54542	**Name:sudalaimani**	**Age/Sex:** 65/M	**From:**19/07/2012	**To:**23/08/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region, radiations towards the groin, burning micturition since3 month					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7600cells/cumm	**Albmin:** trace	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 8mm is seen UB: Normal IMPRESSION: Lt Renal Calculus	**Tc:**7800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 1mm is seen UB: Normal IMPRESSION: Lt Renal Calculus OBSERVATION Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:64%	**Deposits:**		**P:**68%	**Deposits:**NAD	
L:36%	3-7 pus cells		**L:**38%		
E:5%			**E:**8%		
ESR:1/2 Hr.35mm 1Hr.22mm			**ESR:** 1/2 Hr.40mm 1Hr.26mm		
Hb:82%			**Hb:**84%		
Sugar:78mgs%			**Sugar:**82mgs%		
Urea:18mgs%			**Urea:**19mgs%		

10.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:54681	**Name:Aarumugan**	**Age/Sex:40**/M	**From:** 26/07/2012	**To:** 30/08/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the renal angle , burning micturation ,pain the loin region since 3 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7400cells/cumm	Albmin: trace	R.T.KIDNEY:Non obstructive intra renal calculi are seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**7600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 1cm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus OBSERVATION: Poor Response
Dc:	Sugar: +		**Dc:**	**Sugar:** +	
P:58%	Deposits:		**P:**62%	**Deposits:**NAD	
L:32%	8-10 pus cells		**L:**36%		
E: 6%			**E:**8%		
ESR: 1/2 Hr.20mm 1Hr.30mm			**ESR:** 1/2 Hr.36mm 1Hr.40mm		
Hb:76mgs%			**Hb:**82mgs%		
Sugar:182mgs%			**Sugar:**190mgs%		
Urea:20mgs%			**Urea:**18mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

11.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO: 56608	**Name:** Latha	**Age/Sex:4**0/F	**From:**26/07/2012	**To:**30/08/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region radiations towards the groin,burning micturition nausea since 4 month					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: : A calculus of size 8mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**8600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:68%	**Deposits:**		**P:**72%	**Deposits:**NAD	
L:32%	2-3 pus cells		**L:**34%		
E:4%			**E:**6%		
ESR:1/2 Hr.36mm 1Hr.22mm			**ESR:** 1/2 Hr.40mm 1Hr.20mm		
Hb:84%			**Hb:**86%		
Sugar:120mgs%			**Sugar:**124mgs%		
Urea:18mgs%			**Urea:**20mgs%		

12.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:56683	**Name:** Aptheen	**Age/Sex:59**/m	**From:** 27/07/2012	**To:** 31/08/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the renal angle ,burning micturation since 6 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9200cells/cumm	Albmin: Nil	R.T.KIDNEY:Normal L.T.KIDNEY: A calculus of size 1cm is seen UB: Normal IMPRESSION: Lt Renal Calculus	**Tc:**9400cells/cumm	**Albmin:** Nil	R.T.KIDNEY:Normal L.T.KIDNEY: A calculus of size 1.2cm is seen UB: Normal IMPRESSION: Lt Renal Calculus OBSERVATION: Poor Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:64%	Deposits:NAD		**P:**66%	**Deposits:**NAD	
L:30%			**L:**32%		
E: 2%			**E:**4%		
ESR: 1/2 Hr.30mm 1Hr.17mm			**ESR:** 1/2 Hr.35mm 1Hr.20mm		
Hb:78mgs%			**Hb:**80mgs%		
Sugar:84mgs%			**Sugar:**88mgs%		
Urea:16mgs%			**Urea:**18mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

13.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:56882	**Name:** Paechiyammal	**Age/Sex:55**/F	**From:**27/07/2012	**To:**31/08/2012	**No.Of Days Treated:**35
Complaints And Durations: pain in the loin region radiations towards the groin,burning micturition since 3 month					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7600cells/cumm	**Albmin: trace**	R.T.KIDNEY: A calculus of size 12mm is seen L.T.KIDNEY: A calculus of size8mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**7800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 6mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus OBSERVATION: Fair Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:62%	**Deposits:**		**P:**68%	**Deposits:**NAD	
L:32%	4-5 pus cells 5-10epicells		**L:**36%		
E:4%			**E:**6%		
ESR:1/2 Hr.32mm 1Hr.26mm			**ESR:** 1/2 Hr.48mm 1Hr.38mm		
Hb:74%			**Hb:**76%		
Sugar:96mgs%			**Sugar:**98mgs%		
Urea:17mgs%			**Urea:**19mgs%		

14.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 57688	**Name:** Shanmugavel	**Age/Sex:**37/M	**From:** 2/08/2012	**To:** 06/09/2012	**No.Of Days Treated:**35
Complaints And Durations:,burning micturition,tiredness,pain in the loin region since 4 month					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9000cells/cumm	Albmin: trace	R.T.KIDNEY: A calculus of size 10mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**9200cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 2mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus OBSERVATION :Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:60%	Deposits:		**P:**62%	**Deposits:**NAD	
L:32%	10-12 pus cells		**L:**34%		
E: 6%			**E:**8%		
ESR: 1/2 Hr.45mm 1Hr.20mm			**ESR:** 1/2 Hr.20mm 1Hr.28mm		
Hb:84mgs%			**Hb:**86mgs%		
Sugar:92mgs%			**Sugar:**94mgs%		
Urea:20mgs%			**Urea:**18mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

15.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:58592	**Name:** Ganabathyraman	**Age/Sex:** 62/M	**From:0**3/08/2012	**To:**07/09/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the renal angle,tiredness,burning micturation since 6 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of 6mm is seen L.T.KIDNEY: A calculus of size 3mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8000cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:64%	**Deposits:**		**P:**66%	**Deposits:**NAD	
L:36%	1-5 pus cells 2-3epicells		**L:**38%		
E:4%			**E:**6%		
ESR:1/2 Hr.2mm 1Hr.10mm			**ESR:** 1/2 Hr.30mm 1Hr.20mm		
Hb:76%			**Hb:**78%		
Sugar:94mgs%			**Sugar:**96mgs%		
Urea:18mgs%			**Urea:**19mgs%		

16.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:62853	**Name:** Iyyanraja	**Age/Sex:26**/F	**From:** 03/08/2012	**To:** 07/09/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region ,radiating towards the groin ,burning micturition since 4 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7600cells/cumm	Albmin: trace	R.T.KIDNEY: A calculus of size 5mm is seen L.T.KIDNEY: UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**7800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:58%	Deposits:		**P:**62%	**Deposits:**NAD	
L:36%	5-8 pus cells 1-2 epicells		**L:**38%		
E: 1%			**E:**3%		
ESR: 1/2 Hr.13mm 1Hr.16mm			**ESR:** 1/2 Hr.20mm 1Hr.15mm		
Hb:72mgs%			**Hb:**76mgs%		
Sugar:86mgs%			**Sugar:**88mgs%		
Urea:15mgs%			**Urea:**16mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

17.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO: 62850	**Name:** Patchaiyappan	**Age/Sex:50**/M	**From:**09/08/2012	**To:**13/09/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the renal angle , lower abdominal pain, burning micturation since 4 month .					
INVESTICATIONS					

Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8200cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 1.2cm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**8400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 1.2cm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus OBSERVATION: Poor Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:64%	**Deposits: NAD**		**P:**66%	**Deposits:**NAD	
L:30%			**L:**32%		
E:3%			**E:**5%		
ESR:1/2 Hr.15mm 1Hr.10mm			**ESR:** 1/2 Hr.25mm 1Hr.15mm		
Hb:80%			**Hb:**80%		
Sugar:110mgs%			**Sugar:**108mgs%		
Urea:17mgs%			**Urea:**15mgs%		

18.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 63261	**Name:** Narayanan	**Age/Sex:59**/M	**From:** 14/08/2012	**To:** 18/09/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region ,radiating towards the thigh ,burning micturition , tiredness since 6 month .					
INVESTICATIONS					

Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7800cells/cumm	Albmin: Nil	R.T.KIDNEY:2calculi of size 8mm &6mm is seen L.T.KIDNEY: Normal UB: vesical calculi IMPRESSION: Rt Renal Calculus	**Tc:**8000cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 5mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus OBSERVATION: Fair Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:68%	Deposits:		**P:**68%	**Deposits:**NAD	
L:28%	5-10 pus cells 2-3epicells		**L:**30%		
E: 6%			**E:**8%		
ESR: 1/2 Hr.22mm 1Hr.44mm			**ESR:** 1/2 Hr.13mm 1Hr.15mm		
Hb:66mgs%			**Hb:**68mgs%		
Sugar:82mgs%			**Sugar:**84mgs%		
Urea:18mgs%			**Urea:**19mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

19Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO: 64853	**Name:Samuveel**	**Age/Sex:74**/m	**From:**16/08/2012	**To:**27/09/2012	**No.Of Days Treated:** 42
Complaints And Durations: burning micturation,pain in the loin region , abdominal pain ,tiredness since 1 year .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 9mm is seen L.T.KIDNEY: A calculus of size 8mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 4mm is seen L.T.KIDNEY: A calculus of size 2mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi OBSERVATION: Fair Response
Dc:	**Sugar:** +		**Dc:**	**Sugar:** +	
P:60%	**Deposits:** NAD		**P:**62%	**Deposits:**NAD	
L:34%			**L:**36%		
E:4%			**E:**6%		
ESR:1/2 Hr.17mm 1Hr.30mm			**ESR:** 1/2 Hr.28mm 1Hr.32mm		
Hb:74%			**Hb:**76%		
Sugar:158mgs%			**Sugar:**152mgs%		
Urea:18mgs%			**Urea:**20mgs%		

20.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 67032	**Name:** Rumeelta	**Age/Sex:31**/f	**From:** 24/08/2012	**To:** 28/09/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the renal angle , burning micturation ,tiredness since 4 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8600cells/cumm	Albmin: trace	R.T.KIDNEY: A calculus of size 5mm is seen L.T.KIDNEY: A calculus of size 8mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 3mm is seen UB: Normal IMPRESSION: Lt Renal Calculus OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:58%	Deposits:		**P:**62%	**Deposits:**NAD	
L:34%	Few puscells		**L:**36%		
E: 2%			**E:**3%		
ESR: 1/2 Hr.30mm 1Hr.20mm			**ESR:** 1/2 Hr.40mm 1Hr.25mm		
Hb:64mgs%			**Hb:**68mgs%		
Sugar:96mgs%			**Sugar:**98mgs%		
Urea:20mgs%			**Urea:**21 mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

21.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:67306	**Name:Sivaprakasam**	**Age/Sex:**40/m	**From:**24/08/2012	**To:**28/09/2012	**No.Of Days Treated:**35
Complaints And Durations: pain in the renal angle , pin in micturation , tiredness since 2 month .					
INVESTICATIONS					

Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8000cells/cumm	**Albmin:** trace	R.T.KIDNEY: A calculus of size 4mm is seen L.T.KIDNEY: A calculus of size 4.5mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8200cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:52%	**Deposits:**		**P:**64%	**Deposits:**NAD	
L:46%	3-4epicells		**L:**48%		
E:4%			**E:**6%		
ESR:1/2 Hr.12mm 1Hr.23mm			**ESR:** 1/2 Hr.28mm 1Hr.36mm		
Hb:72%			**Hb:**76%		
Sugar:114mgs%			**Sugar:**118mgs%		
Urea:22mgs%			**Urea:**20mgs%		

22.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 69274	**Name:** Thurai pandian	**Age/Sex:62**/m	**From:** 24/08/2012	**To:** 28/09/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region , radiating towards the groin, burning the micturation , vomiting since 2 month .					
INVESTICATIONS					

Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9000cells/cumm	Albmin: trace	R.T.KIDNEY: A calculus seen in ureter L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**9200cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:54%	Deposits:NAD		**P:**56%	**Deposits:**NAD	
L:44%			**L:**48%		
E: 3%			**E:**5%		
ESR: 1/2 Hr.33mm 1Hr.16mm			**ESR:** 1/2 Hr.48mm 1Hr.26mm		
Hb:76mgs%			**Hb:**78mgs%		
Sugar:78mgs%			**Sugar:**82mgs%		
Urea:24mgs%			**Urea:**22mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

23.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:69418	**Name:** saratha	**Age/Sex:40**/F	**From:**10/09/2012	**To:**19/10/2012	**No.Of Days Treated:** 39
Complaints And Durations: pain in the tlank region ,burning micturation since 4 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 4mm is seen L.T.KIDNEY: 2 calculus of size 4mm&6mm and lt ureteric stone is present UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 4mm is seen UB: Normal IMPRESSION: Lt Renal Calculus OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:52%	**Deposits:**		**P:**54%	**Deposits:**NAD	
L:46%	3-2 pus cells		**L:**48%		
E:3%			**E:**5%		
ESR:1/2 Hr.33mm 1Hr.16mm			**ESR:** 1/2 Hr.28mm 1Hr.26mm		
Hb:76%			**Hb:**78%		
Sugar:74mgs%			**Sugar:**76mgs%		
Urea:24mgs%			**Urea:**20mgs%		

24. Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO: 71789	**Name:** vengat narayanan	**Age/Sex:** 70/m	**From:** 14/09/2012	**To:** 19/10/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the loin region ,radiating towards the groin,burning micturition since 6 month .					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8600cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 9mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**8800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 2mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: : Rt Renal Calculus OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:52%	Deposits:NAD		**P:**56%	**Deposits:**NAD	
L:44%			**L:**42%		
E: 4%			**E:**6%		
ESR: 1/2 Hr.26mm 1Hr.36mm			**ESR:** 1/2 Hr.30mm 1Hr.22mm		
Hb:76mgs%			**Hb:**78mgs%		
Sugar:118mgs%			**Sugar:**120mgs%		
Urea:20mgs%			**Urea:**18mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

25.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:75178	**Name:oorvasi**	**Age/Sex:20**/F	**From:**14/09/2012	**To:**19/10/2012	**No.Of Days Treated:** 35
Complaints And Durations: pain in the renal angle , burning micturation since 3 month.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 4mm is seen L.T.KIDNEY: 2 calculi of size 6.5&4mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 6mm is seen UB: Normal IMPRESSION: Lt Renal Calculus OBSERVATION: Fair Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:64%	**Deposits:**		**P:**66%	**Deposits:**NAD	
L:34%	5-10 pus cells		**L:**36%		
E:4%			**E:**6%		
ESR:1/2 Hr.22mm 1Hr.26mm			**ESR:** 1/2 Hr.36mm 1Hr.28mm		
Hb:68%			**Hb:**72%		
Sugar:112mgs%			**Sugar:**108mgs%		
Urea:22mgs%			**Urea:**24mgs%		

26. Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:75948	**Name:thaeivanayagam**	**Age/Sex:**49/M	**From:** 04/10/2012	**To:** 08/11/2012	**No.Of Days Treated:**35
Complaints And Durations: pain in the tlank region ,burning micturition ,tiredness since 6 months					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9200cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 4mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**9400cells/cumm	**Albmin:** Nil	R.T.KIDNEY:Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:62%	Deposits:		**P:**64%	**Deposits:**NAD	
L:38%	2-3 pus cells		**L:**40%		
E: 6%			**E:**8%		
ESR: 1/2 Hr.26mm 1Hr.20mm			**ESR:** 1/2 Hr.36mm 1Hr.28mm		
Hb:76mgs%			**Hb:**78mgs%		
Sugar:94mgs%			**Sugar:**96mgs%		
Urea:18mgs%			**Urea:**20mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

27.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:77562	**Name:lakshmi**	**Age/Sex:30**/f	**From:**12/10/2012	**To:**16/11/2012	**No.Of Days Treated:**35
Complaints And Durations: burning micturation, pain in the loin radiating the groin,tiredness since 6 months					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9200cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 5mm is seen atureter L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**9400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:54%	**Deposits:**		**P:**56%	**Deposits:**NAD	
L:44%	1-5 pus cells		**L:**48%		
E:4%			**E:**6%		
ESR:1/2 Hr.36mm 1Hr.44mm			**ESR:** 1/2 Hr.48mm 1Hr.22mm		
Hb:74%			**Hb:**76%		
Sugar:86mgs%			**Sugar:**88mgs%		
Urea:17mgs%			**Urea:**16mgs%		

28. Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:80515	**Name:muniyandi**	**Age/Sex:37**/M	**From:** 18/10/2012	**To:** 22/11/2012	**No.Of Days Treated:**35
Complaints And Durations: burning micturation,pain in the tlank region,tiredness since 6 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8400cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 6mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**8600cells/cumm	**Albmin:** Nil	R.T.KIDNEYNormal L.T.KIDNEY: Normal UB: Normal IMPRESSION: : normal OBSERVATION Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:64%	Deposits:		**P:**68%	**Deposits:**NAD	
L:38%	2-3 epi cells		**L:**42%		
E: 2%			**E:**6%		
ESR: 1/2 Hr.36mm 1Hr.42mm			**ESR:** 1/2 Hr.16mm 1Hr.46mm		
Hb:76mgs%			**Hb:**80mgs%		
Sugar:94mgs%			**Sugar:**98mgs%		
Urea:23mgs%			**Urea:**23mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

29.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:80896	**Name:selladurai**	**Age/Sex:**29/m	**From:**18/10/2012	**To:**22/11/2012	**No.Of Days Treated:**35
Complaints And Durations:pain in the renal angle,burning micturation since 6 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8800cells/cumm	**Albmin:** Nil	RT.KIDNEY: A calculus of size 5.5mm is seen LT.KIDNEY: Normal UB: wall thickened IMPRESSION: Rt Renal Calculus	**Tc:**9000cells/cumm	**Albmin:** Nil	RT.KIDNEY: Normal LT.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:48%	**Deposits:**NAD		**P:**52%	**Deposits:**NAD	
L:38%			**L:**42%		
E:4%			**E:**6%		
ESR:1/2 Hr.29mm 1Hr.22mm			**ESR:** 1/2 Hr.32mm 1Hr.40mm		
Hb:62%			**Hb:**64%		
Sugar:82mgs%			**Sugar:**86mgs%		
Urea:17mgs%			**Urea:**15mgs%		

30.Drug: Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:83174	**Namesarathalakshmi**	**Age/Sex:42**/F	**From:** 22/10/2012	**To:** 26/11/2012	**No.Of Days Treated:**35
Complaints And Durations: burning micturation,pain in the tlank region ,radiating towards the groin,tiredness since 6 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8600cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 1cm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**8800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: 2 calculi of size 4mm&5mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: : Rt Renal Calculus OBSERVATION: Poor Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:64%	Deposits:		**P:**66%	**Deposits:**NAD	
L:46%	1-2 pus cells		**L:**48%		
E: 6%			**E:**8%		
ESR: 1/2 Hr.36mm 1Hr.48mm			**ESR:** 1/2 Hr.26mm 1Hr.38mm		
Hb:76mgs%			**Hb:**78mgs%		
Sugar:84mgs%			**Sugar:**86mgs%		
Urea:14mgs%			**Urea:**16mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

31.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:87050	**Name:Raman**	**Age/Sex:**47/M	**From:**23/10/2012	**To:**28/11/2012	**No.Of Days Treated:**36
Complaints And Durations:burning micturation,pain in the renal angle,radiating towards the groin,tiredness since 6 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: 3 calcului of size 4mm&5mm&3mm is seen UB: Normal IMPRESSION: Lt Renal Calculus	**Tc:**7800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:52%	**Deposits:**NAD		**P:**54%	**Deposits:**NAD	
L:36%			**L:**38%		
E:4%			**E:**6%		
ESR:1/2 Hr.36mm 1Hr.32mm			**ESR:** 1/2 Hr.12mm 1Hr.10mm		
Hb:78%			**Hb:**82%		
Sugar:120mgs%			**Sugar:**124mgs%		
Urea:14mgs%			**Urea:**16mgs%		

32. Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:88346	**Name:prem**	**Age/Sex:**30/m	**From:** 23/10/2012	**To:** 28/11/2012	**No.Of Days Treated:**36
Complaints And Durations: burning micturation,pain in the tlank region,tiredness since 6 month.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9600cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 5mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**9800cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:48%	Deposits:		**P:**52%	**Deposits:**NAD	
L:32%	3-5 pus cells 2-3 epi cells		**L:**34%		
E: 3%			**E:**5%		
ESR: 1/2 Hr.46mm 1Hr.10mm			**ESR:** 1/2 Hr.54mm 1Hr.20mm		
Hb:68mgs%			**Hb:**70mgs%		
Sugar:96mgs%			**Sugar:**98mgs%		
Urea:27mgs%			**Urea:**19mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

33.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:88345	**Name:vanitha**	**Age/Sex:50**/F	**From:**23/10/2012	**To:**28/11/2012	**No.Of Days Treated:**36
Complaints And Durations:burning micturation,pain in the renal angle,radiating towards the inner thigh since 4 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7200cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal	**Tc:**7400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:58%	**Deposits:**		**P:**62%	**Deposits:**NAD	L.T.KIDNEY: Normal
L:34%	1-5 pus cells	L.T.KIDNEY: A calculus of size 6mm is seen at ureter	**L:**38%		
E:2%	2-3epicells		**E:**6%		UB: Normal
ESR:1/2 Hr.26mm 1Hr.44mm		UB: Normal	**ESR:** 1/2 Hr.36mm 1Hr.20mm		IMPRESSION: Normal Study
Hb:84%		IMPRESSION: Lt Renal Calculus	**Hb:**86%		OBSERVATION: Good Response
Sugar:92mgs%			**Sugar:**96mgs%		
Urea:18mgs%			**Urea:**18mgs%		

34. Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:89021	**Name:Rosemary**	**Age/Sex:**30/M	**From:** 30/10/2012	**To:** 05/12/2012	**No.Of Days Treated:**37
Complaints And Durations: pain in the tlank region,burning micturation,tiredness since 3 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8400cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 5mm is seen	**Tc:**8600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:64%	Deposits:		**P:**68%	**Deposits:**NAD	L.T.KIDNEY: Normal
L:46%	2-3 pus cells	L.T.KIDNEY: A calculus of size 6mm is seen	**L:**48%		
E: 3%	5-10 epi cells		**E:**5%		UB: Normal
ESR: 1/2 Hr.46mm 1Hr.21mm		UB: Normal	**ESR:** 1/2 Hr.34mm 1Hr.24mm		IMPRESSION: Normal Study
Hb:86mgs%			**Hb:**92mgs%		OBSERVATION: Good Response
Sugar:110mgs%			**Sugar:**112mgs%		
Urea:15mgs%		IMPRESSION:	**Urea:**13mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

35.Drug : Yannai nerunjil chooranam-1g					**Diagnosis :**Kalladaippu
O.P.NO:89022	**Name:vellappan**	**Age/Sex:**40/m	**From:**30/10/2012	**To:**05/12/2012	**No.Of Days Treated:**37
Complaints And Durations:burning micturation,pain in the renal angle,radiating towards the inner thigh since 3 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9700cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 9mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**9900cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 2mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: : Rt Renal Calculus OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:54%	**Deposits:**		**P:**58%	**Deposits:**NAD	
L:32%	1-5 pus cells 2-3epicells		**L:**36%		
E:5%			**E:**7%		
ESR:1/2 Hr.22mm 1Hr.45mm			**ESR:** 1/2 Hr.34mm 1Hr.46mm		
Hb:72%			**Hb:**78%		
Sugar:85mgs%			**Sugar:**85mgs%		
Urea:16mgs%			**Urea:**16mgs%		

36.Drug : Yannai nerunjil chooranam-1g					**Diagnosis :** Kalladaippu
O.P.NO:92627	**Name:Aasvin**	**Age/Sex:**35/M	**From:** 30/10/2012	**To:** 05/12/2012	**No.Of Days Treated:**37
Complaints And Durations: burning micturation,pain in the loin,radiating towards the groin,since 3 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7400cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 8mm is seen L.T.KIDNEY: Normal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**7600cells/cumm	**Albmin:** Nil	R.T.KIDNEY:Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:42%	Deposits:NAD		**P:**46%	**Deposits:**NAD	
L:34%			**L:**38%		
E: 2%			**E:**4%		
ESR: 1/2 Hr.34mm 1Hr.12mm			**ESR:** 1/2 Hr.38mm 1Hr.34mm		
Hb:72mgs%			**Hb:**76mgs%		
Sugar:86mgs%			**Sugar:**92mgs%		
Urea:14mgs%			**Urea:**16mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

37.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:92631	**Name:vaani**	**Age/Sex:40**/F	**From:**31/10/2012	**To:**05/12/2012	**No.Of Days Treated:**37
Complaints And Durations:burning micturation,pain in the tlank,tiredness since 3 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:9400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 6mm is seen L.T.KIDNEY: A calculus of size 4mm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**9600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:64%	**Deposits:**		**P:**68%	**Deposits:**NAD	
L:38%	2-5 pus cells 3-8epicells		**L:**42%		
E:1%			**E:**3%		
ESR:1/2 Hr.25mm 1Hr.51mm			**ESR:** 1/2 Hr.42mm 1Hr.34mm		
Hb:82%			**Hb:**84%		
Sugar:86mgs%			**Sugar:**92mgs%		
Urea:14mgs%			**Urea:**16mgs%		

38.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:87108	**Name:**ranjit	**Age/Sex:**21/M	**From:** 01/11/2012	**To:** 05/12/2012	**No.Of Days Treated:**35
Complaints And Durations: burning micturation,pain in the loin region,radiating towards the groin,tiredness since 6 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7800cells/cumm	Albmin: Nil	R.T.KIDNEY: A calculus of size 1.5cm is seen L.T.KIDNEY: A calculus of size 1.2cm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi	**Tc:**8000cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 1.2cm is seen L.T.KIDNEY: A calculus of size 1cm is seen UB: Normal IMPRESSION: Bilateral Renal Calculi OBSERVATION: Poor Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:58%	Deposits:NAD		**P:**62%	**Deposits:**NAD	
L:38%			**L:**42%		
E: 3%			**E:**5%		
ESR: 1/2 Hr.46mm 1Hr.20mm			**ESR:** 1/2 Hr.26mm 1Hr.20mm		
Hb:78mgs%			**Hb:**82mgs%		
Sugar:86mgs%			**Sugar:**88mgs%		
Urea:14mgs%			**Urea:**16mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

39.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :**Kalladaippu	
O.P.NO:93579	**Name:Masaanam**	**Age/Sex:26/**M	**From:**01/11/2012	**To:**05/12/2012	**No.Of Days Treated:**35
Complaints And Durations:burning micturation,pain in the tlank region since 3 months					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:7200cells/cumm	**Albmin:** Nil	R.T.KIDNEY: A calculus of size 6.5mm is seen at mid ureter L.T.KIDNEY: N Normal ormal UB: Normal IMPRESSION: Rt Renal Calculus	**Tc:**7400cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: Normal UB: Normal IMPRESSION: Normal Study OBSERVATION: Good Response
Dc:	**Sugar:** Nil		**Dc:**	**Sugar:** Nil	
P:62%	**Deposits:**		**P:**64%	**Deposits:**NAD	
L:34%	2-5 pus cells 3-8epicells		**L:**36%		
E:4%			**E:**6%		
ESR:1/2 Hr.12mm 1Hr.24mm			**ESR:** 1/2 Hr.38mm 1Hr.42mm		
Hb:78%			**Hb:**82%		
Sugar:82mgs%			**Sugar:**86mgs%		
Urea:16mgs%			**Urea:**17mgs%		

40.Drug : Yannai nerunjil chooranam-1g				**Diagnosis :** Kalladaippu	
O.P.NO:93440	**Name:rani**	**Age/Sex:30/**F	**From:** 01/11/2012	**To:** 05/12/2012	**No.Of Days Treated:**35
Complaints And Durations: burning micturation,pain in the loin radiating towards the groin,tiredness since 3 months.					
INVESTICATIONS					
Before Treatment			**After Treatment**		
Blood	**Urine**	**Ultrasonogram – abdomen**	**Blood**	**Urine**	**Ultrasonogram – abdomen**
Tc:8400cells/cumm	Albmin: Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 7mm is seen UB: Normal IMPRESSION: Lt Renal Calculus	**Tc:**8600cells/cumm	**Albmin:** Nil	R.T.KIDNEY: Normal L.T.KIDNEY: A calculus of size 2mm is seen UB: Normal IMPRESSION: Lt Renal Calculus OBSERVATION:Fair Response
Dc:	Sugar: Nil		**Dc:**	**Sugar:** Nil	
P:62%	Deposits:NAD		**P:**64%	**Deposits:**NAD	
L:42%			**L:**46%		
E: 4%			**E:**6%		
ESR: 1/2 Hr.26mm 1Hr.28mm			**ESR:** 1/2 Hr.42mm 1Hr.32mm		
Hb:72mgs%			**Hb:**78mgs%		
Sugar:92mgs%			**Sugar:**94mgs%		
Urea:18mgs%			**Urea:**20mgs%		

Good Response – Significant relief of signs and symptoms.
Fair Response – Partial relief of signs and symoptoms

Poor Response – insignificant relief of signs and symptoms

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 10	**OP.NO:57346**	**NAME:mahalakshmi**	**AGE/SEX: 47/F**	**OCCUPATION: Coolie**
FROM: 28/07/2012	**TO:01/09/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-64% L-35% E-1%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response: Good	

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 11	**OP.NO: 57754**	**NAME:Rajam**	**AGE/SEX:55/F**	**OCCUPATION: Coolie**
FROM:30/07/2012	**TO: 10/09/2012**	**NO. OF DAYS TREATED:42 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Malaise • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-62% L-36% E-2%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response: Good	

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 12	**OP.NO: 60264**	**NAME:Munieswari**	**AGE/SEX: 20/F**	**OCCUPATION: Coolie**
FROM: 07/08/2012	**TO:11/09/2012**	**NO. OF DAYS TREATED: 36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since8 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-59% L-38% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 12mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 20mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.5gms%)	Ova: - Nil	Hb: 68% (8.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Poor

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 13	**OP.NO: 61913**	**NAME:Ramalakshmi**	**AGE/SEX:40/F**	**OCCUPATION: Coolie**
FROM: 13/08/2012	**TO: 17/09/2012**	**NO. OF DAYS TREATED: 36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-62% L-36% E-2%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 7mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 17mm	**MOTION**
	Hb: 52% (7.7gms%)	Ova: - Nil	Hb: 68% (9.8gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 14	**OP.NO: 62238**	**NAME:Navaneethakrishnan**	**AGE/SEX: 29/M**	**OCCUPATION: Coolie**
FROM: 17/08/2012	**TO: 21/09/2012**	**NO. OF DAYS TREATED: 36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9100 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-61% L-38% E-1%	Sugar: Nil
	ESR: ½ hr: 11mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 24mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.9gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response: Fair	

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 15	**OP.NO: 64955**	**NAME:Arunachalavadivu**	**AGE/SEX:50/F**	**OCCUPATION: Coolie**
FROM:23/08/2012	**TO:26/09/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7500 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-61% L-37% E-2%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.5gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response: Fair	

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 16	**OP.NO: 67216**	**NAME:Muthammal**	**AGE/SEX:55/F**	**OCCUPATION: Coolie**
FROM: 31/08/2012	**TO: 26/10/2012**	**NO. OF DAYS TREATED: 34 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 8 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-62% L-37% E-1%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 54% (6.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 17	**OP.NO:70471**	**NAME:Devi**	**AGE/SEX:20/F**	**OCCUPATION: Coolie**
FROM: 10/09/2012	**TO: 13/10/2012**	**NO. OF DAYS TREATED: 34 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-39% E-1%	Sugar: Nil	DC: P-62% L-37% E-1%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 7mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 14mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Fair

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 18	**OP.NO: 71213**	**NAME:Sivaram**	**AGE/SEX:59/M**	**OCCUPATION: Coolie**
FROM: 12/09/2012	**TO: 17/10/2012**	**NO. OF DAYS TREATED: 35days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 58% (7.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 19	**OP.NO: 75177**	**NAME:Krishnan**	**AGE/SEX: 49/M**	**OCCUPATION: Coolie**
FROM: 24/09/2012	**TO: 26/10/2012**	**NO. OF DAYS TREATED: 32 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-59% L-38% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 12mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 25mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 60% (8.2gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 20	**OP.NO:75564**	**NAME:Sitalakshmi**	**AGE/SEX: 25/F**	**OCCUPATION: Coolie**
FROM: 25/09/2012	**TO: 30/10/2012**	**NO. OF DAYS TREATED:36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.1gms%)	Ova: - Nil	Hb: 68% (8.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Poor

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 21	**OP.NO: 75949**	**NAME:Mathumathy**	**AGE/SEX: 17/F**	**OCCUPATION: Coolie**
FROM: 26/09/2012	**TO: 31/10/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 13mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 26mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 57% (7.3gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 22	**OP.NO: 77561**	**NAME:Muthuram**	**AGE/SEX:40/M**	**OCCUPATION: Coolie**
FROM:01/10/2012	**TO: 05/11/2012**	**NO. OF DAYS TREATED: 36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 8 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-62% L-37% E-1%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.5gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Fair

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 23	**OP.NO:80516**	**NAME:Tamilselvan**	**AGE/SEX: 40/M**	**OCCUPATION: Coolie**
FROM:10/10/2012	**TO:14/11/2012**	**NO. OF DAYS TREATED: 36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 60% (8.1gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 24	**OP.NO: 81643**	**NAME:Thayammal**	**AGE/SEX:55/F**	**OCCUPATION: Coolie**
FROM:01/10/2012	**TO: 06/11/2012**	**NO. OF DAYS TREATED: 37 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 59% (8.0gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Fair

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 25	**OP.NO: 82789**	**NAME:Selvam**	**AGE/SEX: 40/M**	**OCCUPATION: Coolie**
FROM: 17/10/2012	**TO: 21/11/2012**	**NO. OF DAYS TREATED: 36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 14mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 28mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 54% (6.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 26	**OP.NO: 82790**	**NAME:Premalatha**	**AGE/SEX:20/F**	**OCCUPATION: Coolie**
FROM: 17/10/12	**TO: 19/11/12**	**NO. OF DAYS TREATED: 34 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 12mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 57% (7.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 27	**OP.NO:87889**	**NAME:Mariyappan**	**AGE/SEX:58/M**	**OCCUPATION: Coolie**
FROM: 03/11/10/12	**TO: 14/11/12**	**NO. OF DAYS TREATED:32 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 14mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 22mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 60% (8.4gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 28	**OP.NO: 87888**	**NAME:Revathy**	**AGE/SEX:20/F**	**OCCUPATION: Coolie**
FROM: 22/10/12	**TO: 24/11/12**	**NO. OF DAYS TREATED: 33 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 59% (7.3gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 29	**OP.NO: 88348**	**NAME:Rama**	**AGE/SEX:18/F**	**OCCUPATION: Coolie**
FROM: 30/10/12	**TO: 9/12/12**	**NO. OF DAYS TREATED: 40days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-59% L-38% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 11mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 24mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Fair

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 30	**OP.NO: 88347**	**NAME:Vishwa**	**AGE/SEX: 22/M**	**OCCUPATION: Coolie**
FROM: 30/10/12	**TO:1/12/12**	**NO. OF DAYS TREATED:32 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
• Dyspnoea on exertion	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
• Palpitation Since 6 months.	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 55% (6.5gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 31	**IP.NO: 1864**	**NAME:Parvathy**	**AGE/SEX: 59/F**	**OCCUPATION: Coolie**
FROM: 11/06/12	**TO: 10/07/12**	**NO. OF DAYS TREATED: 30 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
• Dyspnoea on exertion	DC: P-59% L-37% E-4%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
• Palpitation Since 6 months.	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 62% (8.5gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Fair

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO:32	**IP.NO: 1865**	**NAME:Muthulakshmi**	**AGE/SEX: 44/F**	**OCCUPATION: Coolie**
FROM: 11/06/12	**TO: 10/07/12**	**NO. OF DAYS TREATED:30 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 52% (7.0gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 33	**IP.NO: 2211**	**NAME:Saleem**	**AGE/SEX:40/M**	**OCCUPATION: Coolie**
FROM: 10/07/12	**TO: 11/08/12**	**NO. OF DAYS TREATED: 33 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 13mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 25mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 34	**IP.NO: 1955**	**NAME:Udayal**	**AGE/SEX:70/F**	**OCCUPATION: Coolie**
FROM: 18/06/12	**TO:23/07/12**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 65% (8.9gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response: Good	

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 35	**IP.NO: 2866**	**NAME:Balammal**	**AGE/SEX:60/F**	**OCCUPATION: Coolie**
FROM: 30/08/12	**TO: 29/09/12**	**NO. OF DAYS TREATED: 31 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-61% L-37% E-2%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 62% (8.8gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response: Good	

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 36	**IP.NO: 3036**	**NAME:Uthchimagali**	**AGE/SEX: 67/M**	**OCCUPATION: Coolie**
FROM:12/09/12	**TO:11/10/12**	**NO. OF DAYS TREATED: 30days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-59% L-38% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Fair

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 37	**IP.NO: 3236**	**NAME:Mugamathu**	**AGE/SEX:56/M**	**OCCUPATION: Coolie**
FROM: 27/09/12	**TO:30/12/12**	**NO. OF DAYS TREATED:34 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 38	**IP.NO: 3495**	**NAME:Papa**	**AGE/SEX: 60/F**	**OCCUPATION: Coolie**
FROM:09/10/12	**TO:07/11/12**	**NO. OF DAYS TREATED:30 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (7.8gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 39	**IP.NO: 3528**	**NAME:Magali**	**AGE/SEX: 60/M**	**OCCUPATION: Coolie**
FROM:11/10/12	**TO: 06/11/12**	**NO. OF DAYS TREATED: 30 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 62% (8.8gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Fair

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 40	**IP.NO:86339**	**NAME:Utchimagali**	**AGE/SEX:40/M**	**OCCUPATION: Coolie**
FROM: 30/10/12	**TO:30/11/12**	**NO. OF DAYS TREATED:31 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response: Good	

DRUG: Mandoorachenduram 100mg bd with Honey			**DIAGONOSIS**: PAANDU	
S.NO: 1	**OP.NO: 39202**	**NAME:paechiyamal**	**AGE/SEX:36/F**	**OCCUPATION: Coolie**
FROM: 25/05/2012	**TO: 29/06/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Palpitation Since 6 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 9200 cells/cumm	Albumin: Nil
	DC: P-60% L-37% E-3%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: 2-3 pus cells/cu.mm	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 23mm	**MOTION**	1 hr: 15mm	**MOTION**
	Hb: 61% (8.2gms%)	Ova: - Nil	Hb: 68% (9.7gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 120mgs%		Sugar(R): 94mgs%	
	Urea: 32mgs%		Urea: 20mgs%	
	Cholesterol: 155mgs%		Cholesterol: 155mgs%	
			Response:	Good

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 2	**OP.NO: 36946**	**NAME: suguna**	**AGE/SEX:34/F**	**OCCUPATION: Coolie**
FROM: 27/05/2012	**TO: 01/07/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Loss of appetite • Dyspnoea on exertion • Tiredness Since 2 months.	TC: 7600 cells/cumm	Albumin: Nil	TC: 8400 cells/cumm	Albumin: Nil
	DC: P-63% L-35% E-2%	Sugar: Nil	DC: P-60% L-37% E-3%	Sugar: Nil
	ESR: ½ hr: 8mm	Deposits: Occ.epithelial cells	ESR: ½ hr: 5mm	Deposits: NAD
	1 hr: 15mm	**MOTION**	1 hr: 10mm	**MOTION**
	Hb: 60% (8.6gms%)	Ova: - Nil	Hb: 64% (9.1gms%)	Ova: - Nil
	MCV: 82cumm	Cyst: - Nil	MCV: - 90cumm	Cyst: - Nil
	PCV: 32%	Occult Blood: - Nil	PCV: - 44%	Occult Blood: - Nil
	Sugar(R): 101 mgs%		Sugar(R): 96mgs%	
	Urea: -		Urea: 21mgs%	
	Cholesterol: 221mgs%		Cholesterol: 210mgs%	
			Response:	Poor

+ Mild ++ Moderate +++ Severe

Good Response – Significant relief of symptoms Fair Response – Partial relief of symptoms Poor response – Insignificant relief of symptoms

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 3	**OP.NO:40411**	**NAME:parvathy**	**AGE/SEX: 59/F**	**OCCUPATION: Coolie**
FROM: 30/05/2012	**TO: 08/07/2012**	**NO. OF DAYS TREATED: 39 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Dyspnoea on exertion • Tiredness • Loss of appetite Since 3 weeks	TC: 9700 cells/cumm	Albumin: Nil	TC: 10200 cells/cumm	Albumin: Nil
	DC: P-57% L-38% E-5%	Sugar: Nil	DC: P-55% L-40% E-5%	Sugar: Nil
	ESR: ½ hr: 2mm	Deposits: NAD	ESR: ½ hr: 4mm	Deposits: NAD
	1 hr: 4mm	**MOTION**	1 hr: 8mm	**MOTION**
	Hb: 54% (7.7gms%)	Ova: - Nil	Hb: 75% (10.7gms%)	Ova: - Nil
	MCV: 90cumm	Cyst: - Nil	MCV: - 98cumm	Cyst: - Nil
	PCV: 28%	Occult Blood: - Nil	PCV: - 42%	Occult Blood: - Nil
	Sugar(R): 87mgs%		Sugar(R): 92mgs%	
	Urea: 25mgs%		Urea: 24mgs%	
	Cholesterol: 165mgs%		Cholesterol: 182mgs%	
			Response:	Good

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 4	**OP.NO: 41204**	**NAME:paerijan**	**AGE/SEX:50/F**	**OCCUPATION: coolie**
FROM: 02/06/2012	**TO: 07/07/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Palpitation • Dyspnoea on exertion • Tiredness Since 2 months.	TC: 10500 cells/cumm	Albumin: Nil	TC: 10200 cells/cumm	Albumin: Nil
	DC: P-57% L-35% E-8%	Sugar: Nil	DC: P-61% L-35% E-4%	Sugar: Nil
	ESR: ½ hr: 10mm	Deposits: NAD	ESR: ½ hr: 8mm	Deposits: NAD
	1 hr: 20mm	**MOTION**	1 hr: 16mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 78% (11.1gms%)	Ova: -Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: -Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood:- Nil
	Sugar(R): 89mgs%		Sugar(R): 102mgs%	
	Urea: 12mgs%		Urea: 24mgs%	
	Cholesterol: 163mgs%		Cholesterol: 182mgs%	
			Response:	Good

+ Mild ++ Moderate +++ Severe

Good Response – Significant relief of symptoms Fair Response – Partial relief of symptoms Poor response – Insignificant relief of symptoms

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 5	**OP.NO: 41252**	**NAME:koomu**	**AGE/SEX:40/F**	**OCCUPATION: House wife**
FROM: 02/05/2012	**TO:07/07/2012**	**NO. OF DAYS TREATED:36 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Palpitation • Giddiness • Tiredness Since 3 month	TC: 7000 cells/cumm	Albumin: Nil	TC: 8900 cells/cumm	Albumin: Nil
	DC: P-55% L-40% E-5%	Sugar: Nil	DC: P-55% L-42% E-3%	Sugar: Nil
	ESR: ½ hr: 6mm	Deposits: NAD	ESR: ½ hr: 2mm	Deposits: NAD
	1 hr: 12mm	**MOTION**	1 hr: 4mm	**MOTION**
	Hb: 68% (9.7gms%)	Ova: - Nil	Hb: 77% (11gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: Nil-
	Sugar(R): 109mgs%		Sugar(R): 88mgs%	
	Urea: 27mgs%		Urea: 20mgs%	
	Cholesterol: 198mgs%		Cholesterol: 212mgs%	
			Response:	Good

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 6	**OP.NO: 41613**	**NAME:sankaraammal**	**AGE/SEX:5 5/M**	**OCCUPATION: coolie**
FROM: 04/06/2012	**TO: 09/07/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Dyspnoea on exertion • Loss of appetite • Tiredness Since 28days.	TC: 8900 cells/cumm	Albumin: Nil	TC: 9300 cells/cumm	Albumin: Nil
	DC: P-56% L-39% E-5%	Sugar: Nil	DC: P-49% L-50% E-1%	Sugar: Nil
	ESR: ½ hr: 5mm	Deposits: NAD	ESR: ½ hr: 1mm	Deposits: NAD
	1 hr: 10mm	**MOTION**	1 hr: 2mm	**MOTION**
	Hb: 64% (9.1gms%)	Ova: - Nil	Hb: 72% (10.3gms%)	Ova: - Nil
	MCV: 88cumm	Cyst: - Nil	MCV: - 96cumm	Cyst: - Nil
	PCV: 30%	Occult Blood: - Nil	PCV: - 40%	Occult Blood: - Nil
	Sugar(R): 82mgs%		Sugar(R): 97mgs%	
	Urea: 18mgs%		Urea: 22mgs%	
	Cholesterol: 146mgs%		Cholesterol: 186mgs%	
			Response:	Good

+ Mild ++ Moderate +++ Severe

Good Response – Significant relief of symptoms Fair Response – Partial relief of symptoms Poor response – Insignificant relief of symptoms

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 7	**OP.NO: 54234**	**NAME: Vel**	**AGE/SEX: 50/M**	**OCCUPATION: Coolie**
FROM: 18/07/2012	**TO: 22/08/2012**	**NO. OF DAYS TREATED: 35days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Tiredness • Dyspnoea on exertion • Loss of appetite Since 8 months	TC: 8100 cells/cumm	Albumin: Nil	TC: 8300 cells/cumm	Albumin: Nil
	DC: P-61% L-36% E-3%	Sugar: Nil	DC: P-64% L-34% E-2%	Sugar: Nil
	ESR: ½ hr: 1mm	Deposits: NAD	ESR: ½ hr: 2mm	Deposits: NAD
	1 hr: 3mm	**MOTION**	1 hr: 4mm	**MOTION**
	Hb: 61% (8.7gms%)	Ova: - Nil	Hb: 70% (10gms%)	Ova: - Nil
	MCV: -	Cyst: - Nil	MCV: -	Cyst: - Nil
	PCV: -	Occult Blood: - Nil	PCV: -	Occult Blood: - Nil
	Sugar(R): 111mgs%		Sugar(R): 110mgs%	
	Urea: 14mgs%		Urea: 14mgs%	
	Cholesterol: 168mgs%		Cholesterol: 150mgs%	
			Response:	Good

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 8	**OP.NO:54305**	**NAME: maheshwari**	**AGE/SEX:29/F**	**OCCUPATION: House wife**
FROM: 18/07/2012	**TO: 22/08/2012**	**NO. OF DAYS TREATED: 35days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
	BLOOD	**URINE**	**BLOOD**	**URINE**
• Palpitation • Tiredness • Loss of appetite Since 4 months.	TC: 9800 cells/cumm	Albumin: Nil	TC: 9700 cells/cumm	Albumin: Nil
	DC: P-63% L-34% E-3%	Sugar: Nil	DC: P-60% L-36% E-4%	Sugar: Nil
	ESR: ½ hr: 2mm	Deposits: NAD	ESR: ½ hr: 2mm	Deposits: NAD
	1 hr: 4mm	**MOTION**	1 hr: 3mm	**MOTION**
	Hb: 66% (9.9gms%)	Ova: - Nil	Hb: 77% (11gms)	Ova: - Nil
	MCV: cumm	Cyst: - Nil	MCV: cumm	Cyst: - Nil
	PCV: %	Occult Blood: - Nil	PCV: %	Occult Blood: - Nil
	Sugar(R): 80mgs%		Sugar(R): 85mgs%	
	Urea: 20mgs%		Urea: 22mgs%	
	Cholesterol: 119mgs%		Cholesterol: 108mgs%	
			Response:	Fair

+ Mild ++ Moderate +++ Severe

Good Response – Significant relief of symptoms Fair Response – Partial relief of symptoms Poor response – Insignificant relief of symptoms

DRUG: Mandoorachenduram100mg bd with honey			**DIAGONOSIS**: PAANDU	
S.NO: 9	**OP.NO: 56633**	**NAME: masanam**	**AGE/SEX: 40/F**	**OCCUPATION: Coolie**
FROM:26/07/2012	**TO: 30/08/2012**	**NO. OF DAYS TREATED: 35 days**		

COMPLAINTS AND DURATION	**INVESTIGATION**			
	BEFORE TREATMENT		**AFTER TREATMENT**	
• Dyspnoea on exertion • Palpitation • Loss of appetite Since 2 months.	**BLOOD**	**URINE**	**BLOOD**	**URINE**
	TC: 10,000 cells/cumm	Albumin: Nil	TC: 10,000 cells/cumm	Albumin: Nil
	DC: P-63% L-32% E-5%	Sugar: Nil	DC: P-65% L-31% E-4%	Sugar: Nil
	ESR: ½ hr: 7mm	Deposits: NAD	ESR: ½ hr: 5mm	Deposits: NAD
	1 hr: 8mm	**MOTION**	1 hr: 6mm	**MOTION**
	Hb: 63% (9.0gms%)	Ova: - Nil	Hb: 69% (9.8gms%)	Ova: - Nil
	MCV: - 74cumm	Cyst: - Nil	MCV: - 75cumm	Cyst: - Nil
	PCV: -36.8%	Occult Blood: - Nil	PCV: - 40%	Occult Blood: - Nil
	Sugar(R): 126mgs%		Sugar(R): 125mgs%	
	Urea: 16mgs%		Urea: 8 mgs%	
	Cholesterol: 128mgs%		Cholesterol: 128 mgs%	
			Response: Fair	

+ Mild ++ Moderate +++ Severe

Good Response – Significant relief of symptoms Fair Response – Partial relief of symptoms Poor response – Insignificant relief of symptom

MANGALA HOSPITAL

Pat Name: MR. MUTHURAMALINGAM	Age: 39 Y / M	Date: 03 – 10 - 2011
Ref by : DR. S.RAVINDRAN MS		

ULTRASOUND ABDOMEN

LIVER - Size and echoes of the liver are within normal limits. Main portal vein and its branches appear normal. No intrahepatic biliary duct dilatation. No evidence of any focal lesions in the liver. CBD at the porta is normal size.

GB - Appears normal in size. No evidence of sludge / stones / probe tenderness / pericholecystic collection / wall thickening.

PANCREAS - Appears normal in size and echotexture. No evidence of calculi / calcification.

SPLEEN - Splenic echoes and size are within normal limits.

KIDNEYS - Right kidney measures 98X 48 mm. Left kidney measures 100 X 47mm. Both kidneys show normal cortical echoes. No hydronephrosisThere is a calculus measuring about 5mm noted in lower pole of right kidney. There are two calculi measuring about 5 and 6mm noted in mid and lower calyces of left kidney.

BLADDER - Appears normal in size and echo pattern with normal wall thickness

PROSTATE - Appears normal in size and echoes.

IMPRESSION:

BILATERAL RENAL CALCULI

Kindly correlate clinically.

DR.GUNASEELARAJAN DMRD.,
CONSULTANT RADIOLOGIST.

Thanks for the referral: Kindly let us know the follow up.
Note: Please note that this report is only a professional opinion based on the image findings and not a diagnosis by itself. It has to be correlated clinically and interpreted along with other investigation).

AARTHI SPECIALITY LAB™

AN ISO 9001-2008 ORGANISATION

Patient ID : P0317147

SID No. : 068640

Name : **Mr. CHELLADURAI**

Age / Sex : **29 Yrs/Male**

Ref. By : **AARTHI SCAN - PALAYAMKOTTAI**

Received Date : 24/09/2012 / 11:31

Reported Date : 24/09/2012 / 16:43

Final Test Report

Sample Collected And Sent

Test Name	Result	Units	Normal Range

TEST REPORT

BIOCHEMISTRY

STONE (CALCULUS) ANALYSIS

Calcium oxalate	:	**Present**
Non oxalate calcium	:	**Present**
Cholesterol	:	**Not Present**
Uric acid	:	**Not Present**
Bilirubin	:	**Not Present**
Carbonate	:	**Not Present**

End of the Report

A. Jd

DR. Mrs. A.JAMILA ROSE MD,(PATH)

- TIRUNELVELI : 177, TVM Road, Vannarpettai, Ph : (0462) 2501353. Mob.: 99400 22559.
- PALAYAMKOTTAI : Lakshmi Complex, North High Ground Road. Ph.: (0462) 2581353.
- TUTICORIN : 40, Palai Road, Ph.: (0461) 232 7353. Mob.: 9940110515.
- MADURAI : 4, Dr. Thangaraj Salai, Madurai. Ph.: (0452) 2521353 Mob.: 99400 80508.
- THANJAVUR : 22, Pudukottai Road, Ph.: (04362) 279914, 279917. Mob.: 87544 38504.
- TENKASI : 242, Samba Street, Ph : (04633) 223211. Mob.: 99401 60517.
- KOVILPATTI : 107, Ettayapuram Curve Road, Ph.: (04632) 228626. Mob.: 99400 22448.
- RAJAPALAYAM : 64, Kamaraj Nagar, 2nd Street, Ph : (04563) 225101. Mob.: 99401 10504.
- Aarthi Hospital : No. 60, Santhai Pettai Road, Kovilpatti. Ph : (04632) 221346. Mob.: 94431 41811.

Note : This imaging modality is having its own limitations. Hence this report should be correlated with clinical features and other parameters.

AARTHI SCANS™

AN ISO 9001 ORGANISATION

NAME : MR. CHELLADURAI	DATE: 01/OCT/11
AGE : 27/M	ID.NO. : 8022
REF.BY: DR. P.JEYAKUMAR.MD.,	

USG ABDOMEN

LIVER:

Is normal in size and uniform echo texture.
Intrahepatic biliary radicles and CBD appear normal.
Portal and hepatic veins appear normal.

GALL BLADDER:

Is adequately distended. No internal echoes are seen. Wall thickness is normal.

PANCREAS:

Appears normal in size and it shows uniform echo texture.

SPLEEN:

Is normal in size and uniform echogenicity.

KIDNEYS:

RT.Kidney measures 9.6 X 4.3cms. **A calculus measuring 6mm seen in upper calyx of right kidney.** LT.Kidney measures 10.5 X 5.3cms. **A calculus measuring 10mm seen in lower calyx of left kidney.**
Cortico medullary differentiation is maintained on both sides. Pelvicalyceal system on both sides appears normal.

BLADDER:

Is normal contour. No intra luminal echoes are seen. Urinary bladder wall thickness is normal.

PROSTATE:

Measures 3.1 x 3.1 x 2.6cms.Vol: 13cc

RIF:

Appears normal. No free fluid.

IMPRESSION:

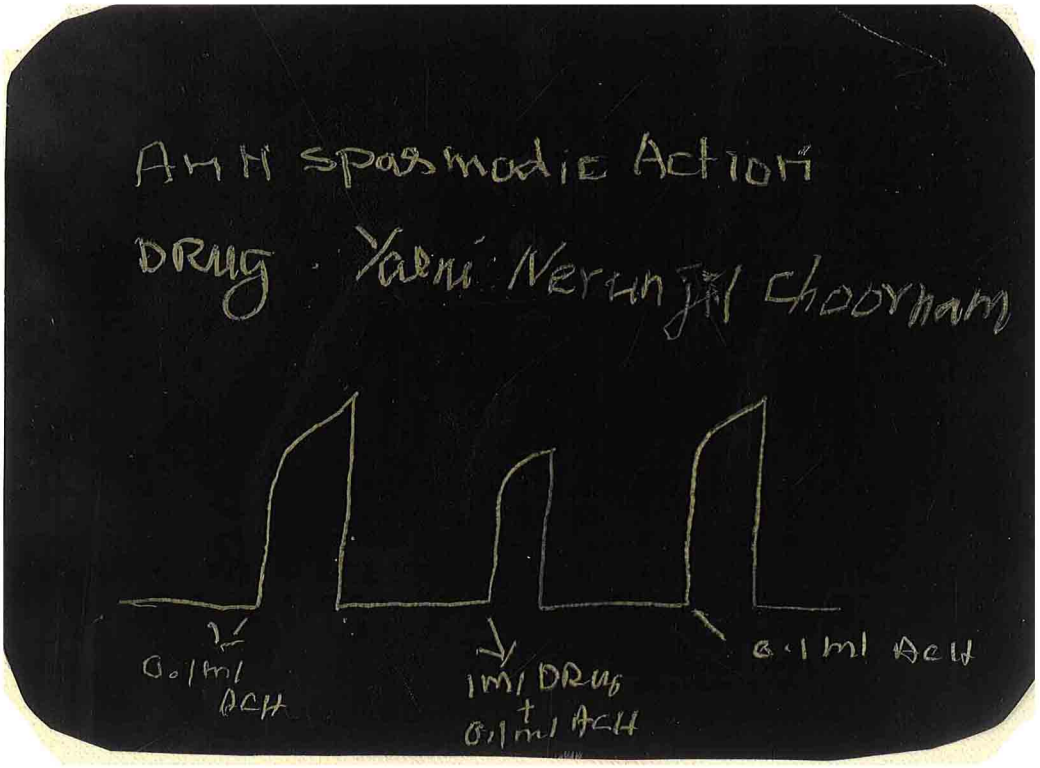
- **Bilateral renal calculi.**

Normal Sonographic study of Liver, Gall Bladder, Spleen, Pancreas, Bladder and Prostate.

DR.K.MANOHARAN, MD, DMRD.,
CONSULTANT RADIOLOGIST.
Foot Note: Patient's identity is not verified. Report is not valid for medico- legal purpose.

- TIRUNELVELI : 177, TVM Road, Vannarapettai, Ph : (0462) 2501353. Mobile : 99400 22559.
- PALAYAMKOTTAI : Lakshmi Complex, North High Ground Road, Tirunelveli. Ph : 2581353.
- TUTICORIN : 40, Palai Road, Ph : (0461) 2327353. Mobile : 99401 10515.
- MADURAI : 4, Dr.Thangaraj Salai, KK Nagar, Madurai. Ph : 0452 2521353. Mobile : 99400 70504.
- TENKASI : 114 / 146, Anaikarai Street, Ph : (04633) 223211. Mobile : 99401 60517.
- KOVILPATTI : 107, Ettayapuram Curve Road, Ph : (04632) 228626. Mobile : 99400 22448.
- RAJAPALAYAM : 64, Kamaraj Nagar, 2nd Street, Ph : (04563) 225101. Mobile : 99401 10504.
- Aarthi Hospital : No. 60, Santhai Pettai Road, Kovilpatti. Ph : 221346. Mobile : 94431 41811.

Anti Spasmodiac Action Drug Yaanai Nerunjil Chooranam



யானை நெருஞ்சிலினால் வெளியேறிய சிறுநீரக கல்

மஞ்சள் கரிசாலை

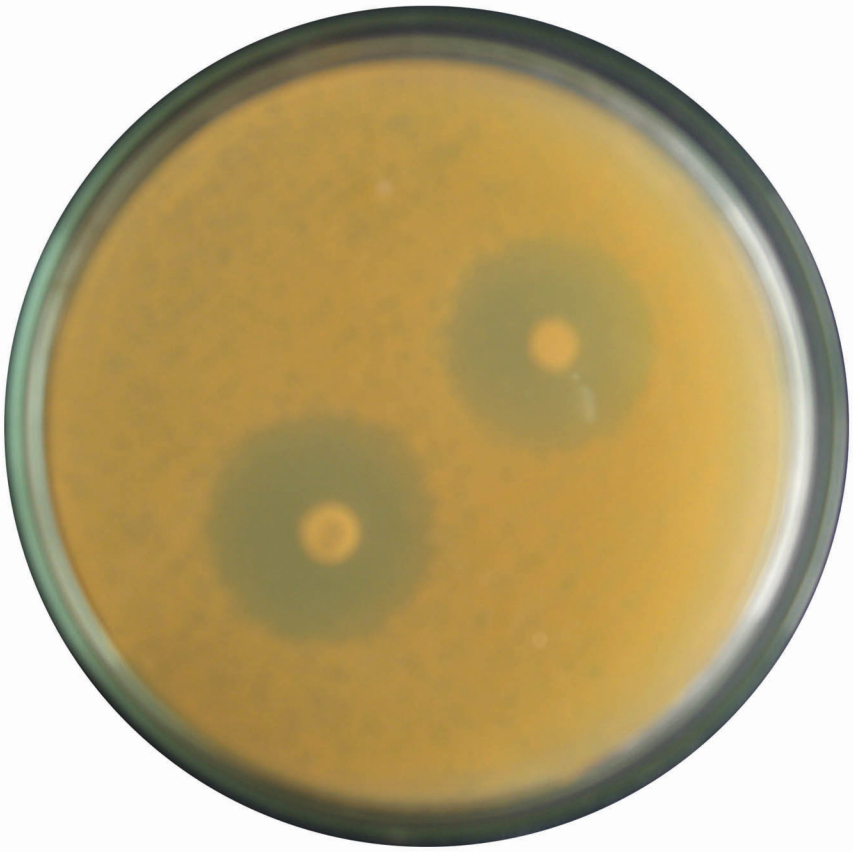
(Wedelia chinensis, Linn)

லோக செந்தூரம்

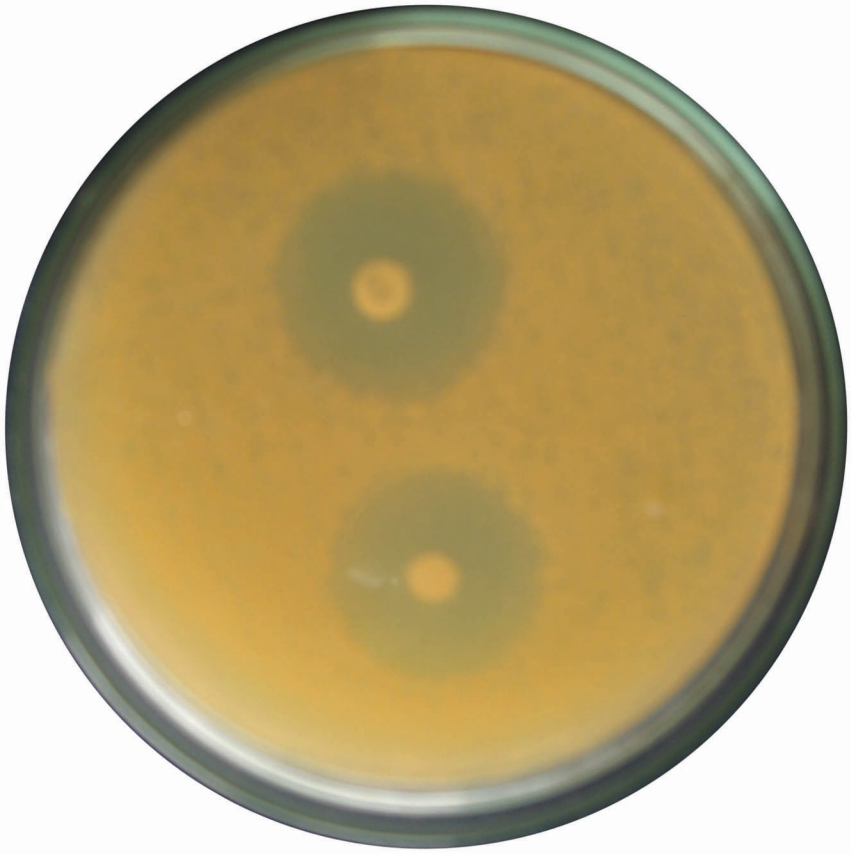
மண்சூரம்

YAANAI NERUJIL CHOORANAM

STRAPHYCOCOCCUS AUREUS
(Moderately Sensitive)



ESCHERICHIA COLI
(Sensitive)



GOVT. SIDDHA MEDICAL COLLEGE,

PALAYAMKOTTAI.

TIRUNELVELI – 627002.

SCREENING COMMITTEE.

Candidate Reg No:32101510

This is to certify that the dissertation topics ***Lithotriptic activity*** of the single drug **YAANAI NERUNJIL CHOORANAM** and ***Haematinic activity*** of the compound drug **MANDOORA CHENDURAM** have been approved by the screening committee.

S.No	Name	Signature
1.	Prof. Dr. N.CHANDRAMOHAN DOSS, M.D(s) Principal & Chairman	
2.	Prof. Dr. R. THANGAMONEY, M.D (s)	
3.	Dr. A. SUBRAMANIAN, M.D (s)	

(Kindly make sure that the minutes of the meeting duly signed by all the participation are maintained by the college office)

SHANMUGHA ARTS, SCIENCE, TECHNOLOGY & RESEARCH ACADEMY (SASTRA)

(A University established under Section 3 of the UGC Act, 1956)

SASTRA University Tirumalaisamudram, Thanjavur-613401.

Centre for Advanced Research in Indian System of Medicine (CARISM)

GOVT. APPROVED DRUG TESTING LABORATORY APPROVAL No. R.DIS.NO.:282/2010

CERTIFICATE OF ANALYSIS

Name of the Product: 099-Yaanai nerunjil Chooranam
Date of Sampling : 09.10.12

Report No : CAR/DTL/CUR058
Report Date: 18.12.12

PHYSICO-CHEMICAL STANDARDISATION

S.No	TESTS	AS PER ANALYSIS
1.	Description	Light Green coloured powder
2.	pH(1% w/v suspension)	6.78
3.	Bulk density	0.32gm/ml
4.	Tap density	0.41gm/ml
5.	Loss on Drying at 105°C	3.58%
6.	Total Ash	14.76%
7.	Acid Insoluble Ash	4.96%
8.	Water Soluble Extractive	30.88%
9.	Alcohol Soluble Extractive	9.41%

ANALYST

LAB IN-CHARGE

ASSOCIATE DEAN & CO-ORDINATOR

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Centre for Advanced Research in Indian System of Medicine (CARISM)

GOVT. APPROVED DRUG TESTING LABORATORY APPROVAL No. R.DIS.NO.:282/2010

CERTIFICATE OF ANALYSIS

Name of the Product: 100-Mandoora Chenduram
Date of Sampling : 09.10.12

Report No : CAR/DTL/CHE067
Report Date: 18.12.12

PHYSICO-CHEMICAL STANDARDISATION

S.No	TESTS	AS PER ANALYSIS
1.	Description	Brown coloured powder
2.	Loss on Drying at 105°C	0.78%
3.	Total Ash	91.57%
4.	Acid Insoluble Ash	58.94%

ANALYST

LAB IN-CHARGE

ASSOCIATE DEAN & CO-ORDINATOR

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

69, Anna Salai, Guindy, Chennai - 32.

DEPARTMENT OF SIDDHA

CERTIFICATE OF PARTICIPATION

This is to certify that Dr. .....R.VINOTHINI.....

has participated as ~~Resource Person~~ / Delegate in the Workshop on

"Research Methodology & Biostatistics" for AYUSH Post Graduates &

Researchers organized by the Dept. of Siddha from 04.01.2011 to 08.01.2011

Dr. N. Kabilan
Prof. & Head

Dr. Sudha Seshayyan
Registrar i/c

Dr. Mayil Vahanan Natarajan
Vice-Chancellor

CONTINUOUS MEDICAL EDUCATION PROGRAMME

Conducted by

POST GRADUATE DEPARTMENT OF GUNAPADAM
GOVT. SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI

Certificate

This is to certify that Dr.R.VINOTHINI.

PG Gunapadam Department, Government Siddha Medical College, Palayamkottai has actively participated in the CME Programme held on 09.01.2013 at conference hall Govt. Siddha Medical College, Palayamkottai, Tirunelveli District.

This programme focussed on **"INTERLINK BETWEEN THE PLANTS AND THE PLANETS, HERBAL REMEDY FOR TUBERCULOSIS & GENERAL GUIDELINES FOR RESEARCH AND EVALUATION OF TRADITIONAL MEDICINE".**

Dr.G.ESSAKKY PANDIAN
Asst. Lecturer, Co-ordinator

Dr.A. KINGSLY
Lecturer, HOD i/c

Dr. N. CHANDRA MOHAN DOSS
Principal